

# SUBJECT INDEX

This index covers all reading matter in **DIABETES**. Most entries refer to material in the **ABSTRACTS**; entries marked with an asterisk (\*) indicate articles which appeared in full in **DIABETES** during 1952. The author index appears on Page 519.

## A

- ACETATE**, in fatty acid synthesis in diabetic liver, effects or fructose on, [Baker & others] 461
- ACETONE**, in the breath [Henderson & others] \*188
- ACID**: See specific acid
- ACID-BASE BALANCE**, hypoglycemic coma and, [Kay & Thorley] 227
- ACIDOSIS**: See also Diabetes, acidosis; Diabetes, coma; Ketone bodies blood sugar and, [Mackler & others] 229
- ammonium chloride, insulin action and, [Mackler & others] 54
- coma and, [Harper] 132
- effects of [Guest & others] \*276
- experimental, insulin action and, [Mackler] 54
- experimental, mechanism, [Beatty & West] 42
- glucose tolerance and, [Mackler & others] 229
- in diabetes with Kimmelstiel-Wilson lesions, [Zubrod & others] 235
- inorganic phosphorus and, [Mackler & others] 229
- plasma potassium and, [Abrams & others] 218; [Mackler & others] 229
- role of ketones in [Fisher] \*108
- uremic, diabetic coma in children and [Root & others] 140
- cis*-Aconitic acid, acidosis and, [Beatty & West] 42
- trans*-Aconitic acid, acidosis and, [Beatty & West] 42
- ACROMEGALY**, diabetes and, estrogen therapy in, [McCullagh & others] 472
- ACTH**, blood sugar control and, [Editorial] 48; [Long] 403
- diabetic ketosis and, [Stowers] 145
- diabetogenic effect, [Bunim & others] 303; [Reid] 57
- diabetogenic effect of growth hormone in rat treated with, [Engel & others] 399
- effect as potential vasodilator, [Sayen & others] 406
- effect on citrate, calcium, glucose and phosphate levels, [Pincus & others] 315
- effect on eosinophils in newborn infants, [Wolman] 485
- endocrine and nonendocrine diseases and, value, dangers and limitations in, [Simpson] 407
- glucose formation and, [Segaloff & Many] 142
- glucose tolerance test and, [Berger] 301
- glycosuria in arthritis and, [Steinbracker & others] 144
- hypoglycemia secondary to islands of Langerhans adenoma and, [Brown & others] 462
- islet-cell tumor of pancreas and, [Smith & Cochran] 407
- metabolic effects, in rheumatoid arthritis, [Brown & others] 303; [Luft & Sjögren] 313
- ocular disease and, [Olsen & others] 55
- rheumatoid arthritis and, [Brown & others] 303; [Bunim & others] 303; [Kersley & others] 52
- rheumatoid arthritis and psoriasis complicated with diabetes and, [Portuondo y de Castro & Cano] 315
- ADDISON'S DISEASE**, differential diagnosis, Simmond's disease and, [Robertson & Kirkpatrick] 317
- ADENOSINE TRIPHOSPHATE**, effect of insulin on, in rat diaphragm, [Walaas & Walaas] 407
- in rabbit muscle extracts, [Weil-Malherbe & Bone] 151
- insulin and, synergistic action on glycemia, [Stutinsky] 481
- phosphorylation of glucose by, reactions in rat-brain extract during, [Weil-Malherbe & Bone] 150
- ADENOSINE - 5 - TRIPHOSPHORIC ACID**, insulin and, synergistic action on glycemia, [Stutinsky] 481
- ADENYLIC DEAMINASE**, in rabbit muscle extracts, [Weil-Malherbe & Bone] 151
- ADRENAL CORTEX**, activity, in diabetic ketosis, [Rosel] 478
- function, evaluation, uropepsin excretion during insulin coma therapy in, [Jacobs & others] 468
- glycogen synthesis in adipose tissue and, [Engel] 128
- insulin response, effect of hypoglycemia and adrenaline on, [Vogt] 149
- ADRENAL CORTICAL HORMONES**, relationship to experimental diabetes [Ingle] \*345
- ADRENALECTOMY**, dehydroascorbic acid diabetes and, [Patterson] 474
- ADRENAL EXTRACTS**, gluconeogenic and lipid hormone content of, [Brown
- ADRENAL GLAND**, cholesterol content, effect of cold stress and alloxan diabetes on, [Shepherd & others] 479
- cold stress and, effect of alloxan diabetes on, [Shepherd & others] 479
- dysfunction, diabetes and, [Lazarus & others] 312
- function, in newborn infants, [Wolman] 485
- glutathione content of, in scurvy, [Banerjee & others] 300
- hormones, bound insulin and, [Stadie & others] 407
- insufficiency, insulin administration and, [Horstmann] 226
- insulin and, [West] 152
- intrasplenic transplants, hypoglycemia and, [Bernstein & Enoch] 124
- medulla, insulin and, [West] 152
- secretion, blood sugar control and, [Long] 403
- ADRENALINE**: See Epinephrine
- ADRENAL STEROIDS**, relationships of glutathione to diabetogenic effect of [Lazarow] \*171
- ADRENERGIC BLOCKING DRUGS**, effects on adrenaline-induced hyperglycemia, [Komrad & Loew] 228
- suppression of epinephrine-induced hyperglycemia and, [Harvey & others] 466
- AGE**, diabetes and, prediction of onset, [Steinberg & Wilder] 480
- diabetes and, psychological response to, [Smith] 143
- glucose tolerance and, [Schneeberg & Finestone] 318; [Scow & Foglia] 142
- ALANINE**, acidosis and, [Beatty & West] 42
- ALBUMIN**, in serum, diabetes and, [Waife & others] 321
- ALBUMINURIA**, intercapillary glomerulohyalinosis in diabetic and, [Azerad & others] 394
- ALCOHOL**, pancreatitis and, [Dreiling & others] 398
- ALCOHOLISM**, diabetes and, vitamin B<sup>12</sup> in, [Menoff] 404
- glycosuria in, hepatic insufficiency and, [Leevy & others] 228
- hyperglycemia in, hepatic insufficiency and, [Leevy & others] 228
- vitamin B<sup>12</sup> in, [Menoff] 404
- ALKALOSIS**, plasma potassium level and, [Abrams & others] 218; [Farber & others] 396
- & others] 129

# SUBJECT INDEX

This index covers all reading matter in **DIABETES**. Most entries refer to material in the **ABSTRACTS**; entries marked with an asterisk (\*) indicate articles which appeared in full in **DIABETES** during 1952. The author index appears on Page 519.

## A

- ACETATE**, in fatty acid synthesis in diabetic liver, effects or fructose on, [Baker & others] 461
- ACETONE**, in the breath [Henderson & others] \*188
- ACID**: See specific acid
- ACID-BASE BALANCE**, hypoglycemic coma and, [Kay & Thorley] 227
- ACIDOSIS**: See also Diabetes, acidosis; Diabetes, coma; Ketone bodies blood sugar and, [Mackler & others] 229
- ammonium chloride, insulin action and, [Mackler & others] 54
- coma and, [Harper] 132
- effects of [Guest & others] \*276
- experimental, insulin action and, [Mackler] 54
- experimental, mechanism, [Beatty & West] 42
- glucose tolerance and, [Mackler & others] 229
- in diabetes with Kimmelstiel-Wilson lesions, [Zubrod & others] 235
- inorganic phosphorus and, [Mackler & others] 229
- plasma potassium and, [Abrams & others] 218; [Mackler & others] 229
- role of ketones in [Fisher] \*108
- uremic, diabetic coma in children and [Root & others] 140
- cis*-Aconitic acid, acidosis and, [Beatty & West] 42
- trans*-Aconitic acid, acidosis and, [Beatty & West] 42
- ACROMEGALY**, diabetes and, estrogen therapy in, [McCullagh & others] 472
- ACTH**, blood sugar control and, [Editorial] 48; [Long] 403
- diabetic ketosis and, [Stowers] 145
- diabetogenic effect, [Bunim & others] 303; [Reid] 57
- diabetogenic effect of growth hormone in rat treated with, [Engel & others] 399
- effect as potential vasodilator, [Sayen & others] 406
- effect on citrate, calcium, glucose and phosphate levels, [Pincus & others] 315
- effect on eosinophils in newborn infants, [Wolman] 485
- endocrine and nonendocrine diseases and, value, dangers and limitations in, [Simpson] 407
- glucose formation and, [Segaloff & Many] 142
- glucose tolerance test and, [Berger] 301
- glycosuria in arthritis and, [Steinbracker & others] 144
- hypoglycemia secondary to islands of Langerhans adenoma and, [Brown & others] 462
- islet-cell tumor of pancreas and, [Smith & Cochran] 407
- metabolic effects, in rheumatoid arthritis, [Brown & others] 303; [Luft & Sjögren] 313
- ocular disease and, [Olsen & others] 55
- rheumatoid arthritis and, [Brown & others] 303; [Bunim & others] 303; [Kersley & others] 52
- rheumatoid arthritis and psoriasis complicated with diabetes and, [Portuondo y de Castro & Cano] 315
- ADDISON'S DISEASE**, differential diagnosis, Simmond's disease and, [Robertson & Kirkpatrick] 317
- ADENOSINE TRIPHOSPHATE**, effect of insulin on, in rat diaphragm, [Walaas & Walaas] 407
- in rabbit muscle extracts, [Weil-Malherbe & Bone] 151
- insulin and, synergistic action on glycemia, [Stutinsky] 481
- phosphorylation of glucose by, reactions in rat-brain extract during, [Weil-Malherbe & Bone] 150
- ADENOSINE - 5 - TRIPHOSPHORIC ACID**, insulin and, synergistic action on glycemia, [Stutinsky] 481
- ADENYLIC DEAMINASE**, in rabbit muscle extracts, [Weil-Malherbe & Bone] 151
- ADRENAL CORTEX**, activity, in diabetic ketosis, [Rosel] 478
- function, evaluation, uropepsin excretion during insulin coma therapy in, [Jacobs & others] 468
- glycogen synthesis in adipose tissue and, [Engel] 128
- insulin response, effect of hypoglycemia and adrenaline on, [Vogt] 149
- ADRENAL CORTICAL HORMONES**, relationship to experimental diabetes [Ingle] \*345
- ADRENALECTOMY**, dehydroascorbic acid diabetes and, [Patterson] 474
- ADRENAL EXTRACTS**, gluconeogenic and lipid hormone content of, [Brown
- ADRENAL GLAND**, cholesterol content, effect of cold stress and alloxan diabetes on, [Shepherd & others] 479
- cold stress and, effect of alloxan diabetes on, [Shepherd & others] 479
- dysfunction, diabetes and, [Lazarus & others] 312
- function, in newborn infants, [Wolman] 485
- glutathione content of, in scurvy, [Banerjee & others] 300
- hormones, bound insulin and, [Stadie & others] 407
- insufficiency, insulin administration and, [Horstmann] 226
- insulin and, [West] 152
- intrasplenic transplants, hypoglycemia and, [Bernstein & Enoch] 124
- medulla, insulin and, [West] 152
- secretion, blood sugar control and, [Long] 403
- ADRENALINE**: See Epinephrine
- ADRENAL STEROIDS**, relationships of glutathione to diabetogenic effect of [Lazarow] \*171
- ADRENERGIC BLOCKING DRUGS**, effects on adrenaline-induced hyperglycemia, [Komrad & Loew] 228
- suppression of epinephrine-induced hyperglycemia and, [Harvey & others] 466
- AGE**, diabetes and, prediction of onset, [Steinberg & Wilder] 480
- diabetes and, psychological response to, [Smith] 143
- glucose tolerance and, [Schneeberg & Finestone] 318; [Scow & Foglia] 142
- ALANINE**, acidosis and, [Beatty & West] 42
- ALBUMIN**, in serum, diabetes and, [Waife & others] 321
- ALBUMINURIA**, intercapillary glomerulohyalinosis in diabetic and, [Azerad & others] 394
- ALCOHOL**, pancreatitis and, [Dreiling & others] 398
- ALCOHOLISM**, diabetes and, vitamin B<sup>12</sup> in, [Menoff] 404
- glycosuria in, hepatic insufficiency and, [Leevy & others] 228
- hyperglycemia in, hepatic insufficiency and, [Leevy & others] 228
- vitamin B<sup>12</sup> in, [Menoff] 404
- ALKALOSIS**, plasma potassium level and, [Abrams & others] 218; [Farber & others] 396
- & others] 129

ALLERGY, insulin reactions in diabetes and, [Blandi] 302; [Herold] 310 to insulin [Paley & Tunbridge] \*22

ALLOXAN, action, [Beach & others] 42; [Bradal] 45; [De Oya & others] 47 action, effect of sulphydryl compounds on, [Sen & Bhattacharya] 479 cataract formation and, [Sterling & Day] 319 diabetes, amino acids excretion in, [Svec & others] 146 diabetes, blood-aqueous barrier penetration by glucose in, [Ross] 318 diabetes, blood glucose in, salicylates and, [Bornstein & others] 302 diabetes, blood sugar and, effect of combined insulin and ergot alkaloid therapy, [Shepherd & Buchanan] 479 diabetes, blood sugar levels, effect of rutin on, [Swift & others] 147 diabetes, carbohydrate metabolism in, [Beach & others] 42 diabetes, cardiovascular lesions in, [Mann & others] 230 diabetes, effect of adrenal and pituitary excision on liver succinoxidase [Wollman & Scow] 154 diabetes, effect on adrenal gland response to cold stress, [Shepherd & others] 479 diabetes, effect of castration and gonadectomy on, [Beach & others] 461 diabetes, effect of certain sulfur compounds on, [Houssay & others] 52 diabetes, incidence, effect of diet on, [Rodriguez & Krehl] 477 diabetes, effect of *meso*-oxalic acid salts, [Kobayashi & others] 468 diabetes, effect on resistance to experimental tuberculosis in rats, [Roche & others] 476 diabetes, enzyme activity in, [Copenhaver & others] 305 diabetes, fetal mortality in, [Barns & others] 42 diabetes, glucose production in, [Stetten & others] 145 diabetes, glucose metabolism in, [Stetten & Stetten] 145 diabetes, glucose oxidation in, [Stetten & others] 145 diabetes, inhibitory effect of kidneys, dibenamine and, [De Oya & others] 47 diabetes, insulin requirements after pancreatectomy, [Rodriguez-Candela] 317 diabetes, ketoacidosis and, tissue electrolytes in, [Knowles & Guest] 468 diabetes, kidney in, [Arteta] 460 diabetes, liver arginase activity in, [Kochakian & others] 469 diabetes, muscular extracts in, glycolytic activity of, [Uzan & Dziri] 149 diabetes, pancreatectomy and, [Mirsky & others] 137 diabetes, plasma-free amino acids in, [Svec & others] 146 diabetes, production in the human, [Lukens] 135 diabetes, regulation of, [Bauman & others] 220 diabetes, renal lesions in, [Mann & others] 230

diabetes, sex and, [Beach & others] 42 diabetes, sodium chloride and, [Chute & others] 45 diabetes, sorbital metabolism in, [Stetten & Stetten] 145 spontaneous recovery in rats [Lazarow] \*363 diabetes, sulphydryl content of tissues in, [Martinez] 471 diabetes, tricarboxylic acid cycle in, [Copenhaver & others] 305 diabetes, vascular lesions and, [Chute & others] 45 diabetes, zinc content of islands of Langerhans and, [Stampfl & others] 233 diabetes, zinc metabolism in, [Maske & others] 230 diabetogenic action, mechanism, [Sen & Bhattacharya] 479 effect on kidneys, [Test & others] 148 formation, uric acid metabolism in liver and, [Grunert & Phillips] 131 hypoglycemia, liver in production of, [Kepinov] 311 inaqueous solution, effect of organic reductants on, [Tipson & Cretcher] 148 in plasma, conversion to alloxanic acid, [Seligson & Seligson] 59 liver nucleoproteins and, [Diermeier & others] 126 role in diabetes, [Seligson & Seligson] 59

ALLOXANIC acid, conversion of alloxan to, [Seligson & Seligson] 59

AMELLIN, inhibition of acetoacetate-induced changes, in blood lactic and blood ascorbic acids, [Nath & Chakrabarti] 314

AMERICAN DIABETES ASSOCIATION, address of president, 1951 [Palmer] \*75 award for paper on diabetes \*422 Committees, 1951-52 \*168 Committees, 1952-53 \*496 Committee on Employment \*351 diabetes detection drive, [Sharkey] 143 Diabetes Detection Drive, 1951, preliminary report \*164 Diabetes Detection Drive 1951 [editorial, Colwell] \*157 Diabetes Detection Drive 1952 [editorial] \*409 Diabetes Week, 1951 \*83 FORECAST, patient education [editorial] \*237 FORECAST \*83 interim council meeting 1952 \*166 objectives [Colwell] \*73 past, present and future [editorial, Allan] \*325 patient education [editorial] \*237 post graduate course in diabetes \*338, \*422 presidential address 1952 [Colwell] \*332 Prize for paper on diabetes \*338 report of Committee on Scientific Exhibits \*251 Salute to DIABETES [Joslin] \*1 Scientific Sessions, 1952, Preliminary Program \*162 thirteenth annual meeting \*497 twelfth annual meeting \*82, [editorial] \*236, \*253, \*338, \*242

AMINO ACIDS, amylase synthesis by pigeon-pancreas slices and, [Hokin] 225 glycogen formation and, [Terriere & Butts] 147 in plasma, diabetic ketosis and, [Gray & Illing] 309 in urine, alloxan diabetes and, [Svec & others] 146 in urine, diabetic ketosis and, [Gray & Illing] 309 in urine, experimental pancreatic diabetes and, [Svec & others] 146  $\alpha$ -keto acids formation from [Johnson & others] 133 plasma-free, in alloxan diabetes, [Svec & others] 146 plasma-free, in experimental pancreatic diabetes, [Svec & others] 146 sequence in phenylalanyl chain of insulin, [Sanger & Tuppy] 141

*p*-AMINOHIPURIC ACID, inhibition of, [Shideman & Renel] 59

*p*-AMINOSALICYLIC ACID, tuberculous diabetes and, [Vieth] 483

AMPUTATION, Charcot joints in diabetic neuropathy and, [Lister & Maudsley] 229 lower extremity in diabetes [Silbert] \*297

AMYLASE, in blood, pancreatitis and, [Bowen] 44; [Lopes de Almeida & Grossman] 403; [Machado] 404 in duodenal contents of kwashiorkor patients, [Thompson & Trowell] 481 in pancreas, effects of x-ray radiation on, [Rauch & Stenstrom] 406 in serum, acute pancreatitis diagnosis and, [Tseng & others] 148 in urine, acute pancreatitis diagnosis and, [Tseng & others] 148 synthesis, by pigeon-pancreas slices, amino acid requirements for, [Hokin] 225

ANDROGENS, action, in experimental diabetes, [Houssay] 51

ANEMIA, anoxia and, [Bollman & others] 395 pernicious, vitamin B<sup>12</sup> in, [Menof] 404

ANEURYSMS, diabetes and, [Igersheimer] 266; [Sherrill] 233 of internal carotid artery, third-nerve palsy and, [Eareckson & Miller] 463 retinal, diabetes and, [Sysil] 320 retinal, diabetes acidosis and, [Dana & others] 462 retinal, in diabetics with glomerular nodules, [Dana & others] 462 retinal, diagnosis, [Igersheimer] 266 retinal, hyperglycemia and, [Dana & others] 305 retinal, incidence in non-diabetic patient, [Ashton] 41

ANOREXIA NERVOSA, differential diagnosis, Simmond's disease and, [Robertson & Kirkpatrick] 317

ANOXIA, anoxic, factors influencing, [Bollman & others] 395 blood sugar and, [Liere & others] 134 intestinal motility and, [Liere & others] 134 myocardial, QT prolongation and, [Bellet & Finkelstein] 43

ANTHRONE REAGENT, blood sugar determination and, [Green & Wade] 400

in spectrophotometric analysis of carbohydrates and glucose, [Zipf] 486  
**ANTIBIOTICS**, tuberculosis in diabetes and, [Montenero & Ettore] 55  
**ANTICONVULSANTS**, in labile diabetes, [Wilson] 153  
**ANTI-INSULIN FACTOR**, in plasma of diabetic patients, [Bornstein & Trewhella] 44  
**ANXIETY**: See Stress  
**AORTA**, diabetes and, [Faber & Lund] 48  
**ARGINASE**, activity, effect of proteins and testosterone on, in alloxan-diabetic liver, [Kochakian & others] 469  
**ARTERENOL**, in adrenal extracts, following injections of insulin, [West] 152  
**ARTERIES**: See Blood vessels  
**ARTERIOSCLEROSIS**  
 atherosclerosis, in diabetes [Barach & Lowry] \*441  
 calcification of vas deferens, [Wilson & Marks] 153  
 cholesterol in pathogenesis of, [Moses] 473  
 coronary, diabetes and, [Robinson] 317; [Thaler & Wornas] 234  
 diabetes and, [Boas] 461; [Carr] 45; [Editorial] 128  
 diabetes and, mortality, [Heintzelmann] 467  
 diabetes and, prophylaxis, [Kaplan] 468  
 diabetes and, sympathectomy in, [Edwards & Crane] 307  
 diabetic neuropathy and, [Epstein] 464  
 diabetic neuropathy, prognosis, [Epstein] 129  
 diagnosis, [Barr & others] 123  
 etiology, cholesterol and, [Bruger & Oppenheim] 125  
 experimental, [Bruger & Oppenheim] 125; [Mardones & others] 137  
 heparin and, [Graham & others] 131  
 intimal vascularization in, [Geiringer] 49  
 lipid deposition in, [Wilens] 153  
 lipid metabolism in, [Kellner] 402  
 lipids in, [Barr & others] 123  
 lipoproteins in, [Barr & others] 123; [Jones & others] 227  
 metabolism of lipoproteins in, effect of heparin, [Graham & others] 131  
 obesity and, [Bruger & Oppenheim] 125  
 obliterans, peripheral, diagnosis, exercise tolerance test in, [Texter & others] 148  
 of the aorta, [Faber & Lund] 48  
 pathogenesis, [Barr & others] 123  
 proteins in, [Barr & others] 123  
 sympathectomy in, [Edwards & Crane] 307  
**ARTHRITIS**, ACTH and cortisone in, glycosuria as complication of, [Steinbracker & others] 144  
 rheumatoid, diabetes and, ACTH in, [Portuondo y de Castro & Cano] 315  
 rheumatoid, diabetes and, adrenal hormones in, [Brown & others] 303  
 rheumatoid, diabetogenic effect of ACTH and cortisone in, [Bunim & others] 303  
 rheumatoid, glycosuria and, therapy, [Bunim & others] 304  
 rheumatoid, hormones in, metabolic effects, [Luft & Sjogren] 313

rheumatoid, hyperinsulinism in, [Abrahamson] 218  
 rheumatoid, therapy, [Kersley & others] 52  
**ARTICHOKE**, hydrolytic enzyme system from, action on carbohydrates present in tubers, [Edelman & Bacon] 127  
**ASCORBIC ACID**, adrenal, depletion of, [Vogt] 149  
 determination, methods, [Fairbridge & others] 129  
 effects on cortisone-induced glyconeogenesis, [Bacchus & others] 460  
 in plasma, sodium acetoacetate-induced changes in, effects of insulin and amellin on, [Nath & Chakrabarti] 314  
**L-ASCORBIC ACID**, alloxan reduction and, [Tipson & Cretcher] 148  
**ASPARTIC ACID**, acidosis and, [Beatty & West] 42  
**ATHEROSCLEROSIS**: See Arteriosclerosis  
**ATOMIC BOMB EMERGENCY**, diabetic and, [Anonymous] 300  
**ATROPINE**, glucose permeability in erythrocytes and, [Yang] 154  
**AUREOMYCIN**, evicerate rat survival and, [Ingle & Nezamis] 52  
**AZOTEMIA**, intercapillary glomerulohyalinosis in diabetes and, [Azerad & others] 394

**B**

**BAL**, alloxan activity and, [Martinez] 471  
 effect on diabetogenic action of alloxan, [Sen & Bhattacharya] 479  
**BANTING MEMORIAL LECTURE**, 1951, Endocrine Control of Blood Sugar [Long] \*3  
 1952, Insulin [Best] \*257  
**BEAK**, defects, in duck embryos, insulin and, [Landauer] 228  
**BENEDICT TEST**, effectiveness in determination of diabetic control, [Fraser] 464  
**BILE ACID**, in plasma, hypercholesteremia after biliary obstruction and, [Friedman & Byers] 400  
**BIOLOGICAL ANTAGONISM** [editorial, Murphy] \*236  
**BLOOD**, acute pancreatitis and, [Gage & Gillespie] 49  
 circulation, digital, effect of potential vasodilators on, [Sayen & others] 406  
 circulation, disturbances, retinal aneurysms and, [Sysil] 320  
 glucose See Blood sugar  
 glutathione content of, in scurvy, [Banerjee & others] 300  
 glycolysis, dietary potassium deprivation and, [Seifter] 143  
**BLOOD-AQUEOUS BARRIER**, penetration by glucose, effect of insulin on, [Ross] 318  
 lactate [Hills & others] \*351  
**BLOOD PRESSURE**, effect of potential vasodilators on, [Sayen & others] 406  
 effect of tetraethylammonium on, [Collazo] 126  
 high, diabetes and [Boas] 461  
 high, diabetes and, vascular damage in, [Mann] 470

high, heredity, diabetes and, [Balme & Cole] 219  
 high, intercapillary glomerulohyalinosis in diabetes and, [Azerad & others] 394  
 high, vascular disease in, optic neuritis and, [Carroll] 304  
 low, orthostatic, in diabetes, high-salt therapy, [Levitt & Handelsman] 134  
 pyruvate [Hills & others] \*351  
**BLOOD SUGAR**, alloxan diabetes and, effect of combined insulin and ergot alkaloid therapy on, [Shepherd & Buchanan] 479  
 alloxan diabetes, effect of *meso*-oxalic acid salts on, [Kobayashi & others] 468  
 alloxan diabetes and, effect of rutin on, [Swift & others] 147  
 alloxan diabetes and, effect of salicylates on, [Bornstein & others] 302  
 anoxia and, [Liere & others] 134  
 arthritis and, following Insulin-Novo administration, [Stepantschitz & Kresbach] 144  
 body temperature and, [Eroz & others] 308  
 control, ACTH and, [Editorial] 48  
 control, adrenaline and, [Editorial] 48  
 control, by endocrine gland secretions, [Long] 403  
 curves, gastrectomy and, [Bracci & Lorenzini] 395  
 determination, acidosis and, [Mackler & others] 229  
 determination, methods, [Fairbridge & others] 129; [Green & Wade] 400; [Kemp & Zuidweg] 311; [Wallace] 408; [Lehmann & Silk] 469; [Margolin & Gentry] 471  
 effect of acetoacetate and glucose on, [Nath & Sahu] 474  
 effect of desoxycorticosterone glucoside on, in adrenalectomized dogs, [Swingle & others] 481  
 effect of phosphoric esters of thiamine on, in diabetes, [Montes] 405  
 effect of Priodax on, [Lominack] 53  
 effect of salicylate on, in alloxan-diabetic rat, [Smith & others] 480  
 effects of stressful life situations on [Hinkle, Jr., & Wolf] \*383  
 effects of stress on, in diabetes, [Annotations] 459  
 effect of tetraethylammonium on, [Collazo] 126  
 endocrine control of [Long] \*3  
 fasting [Long] \*7  
 fasting and, alterations during stress, [Hinkle & Wolf] 310  
 fasting and, in evaluation of metabolism in diabetes, [Otto] 314  
 fasting and, Priscoline in, [Sasson] 58  
 glucose utilization in hepatectomized dogs and, [Mackler & others] 135  
 glycosuria and, correlation in diabetic control, [Fraser] 464  
 growth hormones and, [Maassen] 313  
 hemolytic disease and, in infants, [Gerard] 222  
 insulin and, [Marshall] 404  
 insulin shock therapy and, [Thorley & Kay] 148  
 insulin tolerance test and, in insulin shock therapy, [Perkoff & Tyler] 56



- level, brittle diabetes and, [Schwab] 142
- level, effect of acute and chronic fear on, [Mahl] 470
- level, diabetic acidosis and, [Nabarro & others] 473
- level, effect of breakfast on, [Bryant & others] 303
- level, glucose absorption and, [Lourau & Lartigue] 229
- level, hypoxia and, [Stickney & others] 480
- levels, in normal people following glucose tolerance test, [Mukherjee & others] 473
- low, centaurea and, [Beltran Bigorra & others] 301
- relation to experimental cataracts in rat, [Sterling & Day] 319
- relation to food intake of hypophysectomized, alloxan-treated rat, [Mayer & Bates] 472
- tolerance, curve, effect of condensation product of glucose and ethylacetate on, [Nath & Sahu] 474
- values, work output and, effect of insulin on, [Ingle & others] 226
- BLOOD VESSELS**, calcification, diabetes and, [Kerr & others] 402
- complications of, diabetes and, [Ramirez Panel] 316
- damage, diabetes and, [Editorial] 47
- damage, diabetes and, [Mann] 470
- diabetic complication of, [Bartels & Poulsen] 124
- diseases, diabetes and, [Murdock] 139; [Peters] 56
- diseases, diabetes and, diagnosis, [Duncan & Beidleman] 127
- diseases, digital cutaneous blood flow in, [Priscoline and, [Rottenstein & others] 141
- diseases, hyperglycemia and, [Forsyth & others] 49
- diseases, optic neuritis from, [Carroll] 304
- dysfunction, diabetes and, [Cholst & others] 462
- dysfunction, diabetes and [Handelsman & others] 466
- excised, lipid deposition in, [Wilens] 153
- lesions, alloxan diabetes and, [Chute & others] 45
- lesions, diabetes and, [Root] 317
- peripheral, vasodilatation, [Priscoline in, [Rottenstein & others] 141
- Vascular complications, degenerative, in juvenile diabetes, treated with free diet [Larsson and others] \*449
- Vascular complications, serum lipoproteins and cholesterol in relation to [Keiding and others] \*434
- BODY**, temperature, effect on blood sugar and liver glycogen, [Eroz & others] 308
- BONE**, vascular lesions, diabetes and, [Beidleman & Duncan] 301
- BOOK REVIEWS** Body, Mind, and Sugar, by E. M. Abrahamson \*239
- Diabetic Control, by Edward L. Bortz \*330
- Diabetic Manual, for the Doctor and Patient, by Elliot P. Joslin \*330
- Diabetes Mellitus: Principles and Treatment, by Garfield G. Duncan \*71
- Diabetes and Pregnancy, by Jorgen Pederson \*413
- Endocrine Functions of the Pancreas, by Bernard Zimmerman \*161
- Facts of Life from Birth to Death, by Louis I. Dublin \*238
- Current Therapy, edited by Howard F. Conn \*331
- Handbook of Nutrition, by Council on Foods and Nutrition of the A. M. A. \*72
- Leitfaden fur Zuckerkrankhe, von Georg R. Constam \*330
- Low-Sodium Diet: A Manual for the Patient, by Thurman R. Rice \*160
- The Pathology of Diabetes Mellitus, by Shields Warren and Philip M. Le Compte \*239
- A Primer for Diabetic Patients, by Russell M. Wilder \*330
- Rice, Dietary Controls and Blood Pressure, with Recipes and Menus, by Frances I. Seymour \*160
- Therapie des Diabetes Mellitus, von Georg R. Constam \*72
- Textbook of Endocrinology, edited by Robert H. Williams \*159
- Your Diabetes: A Complete Manual for Patients, by Herbert Pollack \*330
- BOUCHARDAT**, Apollinaire [biographical note, [Joslin] \*490
- BRAIN**, cerebral cortex, effect of 2, 4-dinitrophenol on anaerobic glycolysis in, [Peiss & others] 231
- cerebral cortex, glucose metabolism in, after electrical stimulation, [McIlwain & others] 230
- cerebral cortex, lactic acid formation in, after electrical stimulation, [McIlwain & others] 230
- circulation, in irreversible posthypoglycemic coma, [Fazekas & others] 130
- extracts, hexokinase activity of, [Weil-Malherbe & Bone] 150
- metabolism, in irreversible posthypoglycemic coma, [Fazekas & others] 130
- phospholipid synthesis in, experimental diabetes and, [Zilversmit & DiLuzio] 322
- tissue, hexokinase activity of, [Long] 229
- carbohydrate and protein content of, diabetic and, [Anonymous] 393
- BREAKFASTS**, different types of, effect on blood sugar level, [Bryant & others] 303
- BRITTLE DIABETES**, blood sugar level in, [Schwab] 142
- hyperglycemia in, [Schwab] 142
- hypoglycemia in, [Schwab] 141
- insulin secretion in, [Schwab] 142
- NPH insulin in, [Cardonnet & Staffieri] 304
- therapy, [Arduino & Vieira da Silva] 218; [Paniagua & Dominguez] 139
- BRONZE DIABETES**: See Hemochromatosis
- C
- CACALLA COMPOSITA**, diabetic nostrum, [Medical Forum (Chicago)] 54
- CALCIUM**, in plasma, ion concentration maintenance, [Pincus & others] 315
- in serum, acute pancreatitis diagnosis and, [Tseng & others] 148
- in serum deficiency, diagnostic criterion, [Bellet & Finkelstein] 43
- level of, effect of drugs on, [Pincus & others] 315
- CALCIUM GLUCONATE**, acute pancreatitis and, [Gage & Gillespie] 49
- CAMPS**, diabetic, [Blotner & Marble] 124
- diabetic children [Marble] \*245
- for diabetic children, in the south, [Sweeney] 147
- CANTANI, ARNOLDO**, biographical note [Allen] \*63
- CARBOHYDRATES**, absorption of, after gastrectomy, [Bracci & Lorenzini] 395
- in body fluids, spectrophotometric analysis of, [Zipf] 486
- in bread, diabetics and, [Anonymous] 393
- in tubers, action of a hydrolytic enzyme system from *Helianthus tuberosus* L. on, [Edelman & Bacon] 127
- metabolism, [Peters] 139
- metabolism, adrenal cortex in [Long] \*8
- metabolism, adrenal cortex in, [Bernstein & Enoch] 124
- metabolism, alloxan diabetes and, [Beach & others] 42
- metabolism, diabetes and, [Van Buchem & Nieveen] 483
- metabolism, diabetes and, influence of coronary thrombosis on, [Weinstein] 151
- metabolism, disturbances, differential diagnosis, [Hamwi & von Haam] 132
- metabolism, effects of acidosis on [Guest & others] \*276
- metabolism, effect of removal of infected gallbladder on, [John] 226
- metabolism, effect of veratrin sulfate on, [Collazo] 126
- metabolism, endocrine control of, [Editorial] 47
- metabolism, enzyme systems and, [Hackedorn] 131
- metabolism epinephrine and, [Long] \*10
- metabolism, experimental studies, [Axelrod & others] 41
- metabolism, growth hormone and [Long] \*9
- metabolism, hormones and, [Hackedorn] 131; [Peters] 139
- metabolism, in diabetic coma, [Young] 154
- metabolism, in liver, insulin and, [Bearn & others] 220
- metabolism, insulin and, [Hackedorn] 131
- metabolism, intermediary disturbances in diabetes, obesity and liver parenchyma damage, [Stuhlfauth & Prosiel] 320
- metabolism, peptic ulcer formation and, [Poth & Fromm] 315
- metabolism, riboflavin deficiency and, [Axelrod & others] 41
- metabolism, salicylates and, [Bornstein & others] 302
- metabolism, shock and, [Stoner & others] 481
- metabolism, surgery and, [Elman & Weichselbaum] 308
- protein metabolism and, [Munro] 138

- tolerance, effect of stress in diabetes on, [Annotations] 459
- CARBON**, residual, diabetes and, [Schulitz] 232
- CARBON DIOXIDE**, metabolism of glucose and pyruvate to, by rat diaphragm muscle, [Villev & others] 321
- CARBON TETRACHLORIDE**, pancreatic lesions and, [Veghelyi & others] 483
- CARBOWAX-SULFUR OINTMENT**, in moniliasis, [Hopkins & others] 468
- CASTRATION**, alloxan diabetes and, [Beach & others] 461
- diabetes and, [Rodriguez] 476
- CATARACTS**, diabetes and, development of, [Anonymous] 460
- diabetes and, effect of diet on formation, [Rodriguez & Krehl] 232
- effect of blood sugar level, alloxan, galactose and xylose on rat, [Sterling & Day] 319
- CELLOBOSE**, fermentation, by bacteria from sheep rumen, [Heald] 310
- CELLS**, membrane, influence of insulin on, [Levine] 229
- CENTAUREA**, hypoglycemic action of, [Beltran Bigorra & others] 301
- CEREBROSPINAL FLUID**, protein content, in diabetic neuropathy, [Epstein] 464
- CHARCOT'S JOINT**, diabetes and, [Beidleman & Duncan] 301
- diabetic neuropathy and, [Lister & Maudsley] 229; [Zucker & Marder] 322
- CHLORGUANIDE**, inhibitory action of, [Shideman & Rene] 59
- CHLORIDE**, excretion, stress and, [Hinkle & Wolf] 310
- loss, stress diuresis and, [Hinkle & others] 51
- metabolism, in diabetic acidosis, [Nabarro & others] 474
- in tears, [Giardini & Roberts] 49
- in tissue, in alloxan-diabetic rats with keto-acidosis, [Knowles & Guest] 468
- CHOLECYSTITIS**: See Gallbladder, inflammation
- CHOLESTEROL**, arteriosclerosis and, [Barr & others] 123
- arteriosclerosis and, pathogenesis, [Moses] 473
- diabetes and, [Rodriguez] 476
- excretion, in bile, [Byers & Friedman] 397
- excretion, in mammals, [Friedman & Byers] 400
- in blood, effect of low-fat diet in multiple sclerosis on, [Wilmot & Swank] 235
- lipoprotein molecules, and atherosclerosis in diabetes [Barach & Lowy] \*441
- production, in mammals, [Friedman & Byers] 400
- relationship with arteriosclerosis, [Kaplan] 468
- in serum, correlation of cholesterol and 8-globulin, [Bowen] 44
- in serum, low-fat diet and, [Hildreth & others] 133
- and serum lipoproteins in normal, young diabetics in relation to vascular complications, [Keiding & others] \*434
- synthesis, hormonal control, [Gurin] 224
- synthesis, in liver, [Byers & Friedman] 397
- thyroidectomy by radioiodine and, [Neal & others] 231
- CHOLINE**, diabetes and, [Engelson] 399
- CHYLOMICRA**, composition, [Swank & Wilmot] 146
- diabetes and, [Levy & others] 469
- heparin and, [Swank & Wilmot] 146
- CHYMOTRYPSIN**, action, insulin and, [Phillips] 140
- effect of action on insulin, [Phillips] 56
- crystalline, effect on action of insulin, [Phillips] 405
- insulin digestion and, [Stephen] 144
- CINCOPHEN**, inhibitory action of, [Shideman & Rene] 59
- CITRATE**, level of, effect of drugs on, [Pincus & others] 315
- CITRIC ACID**, in plasma, effect of fructose on, [Miller & others] 404
- CIVIL DEFENSE**, diabetics in, [Blotner & Marble] 124
- emergency care of diabetics [editorial] \*157
- the diabetic in [Committee on Emergency Medical Care] \*78
- CLAUDICATION**, intermittent, in diabetes, [Herapath] 133
- intermittent, induced with friction-belt bicycle ergometer, [Texter & others] 148
- intermittent, sciatic nerve block in, [Marmer] 471
- COCARBOXYLASE**, in blood, diabetes and, effect of insulin on, [Siliprandi & Navazio] 479
- formation from thiamine, insulin and, in diabetic rat, [Siliprandi & Siliprandi] 319
- insulin and, synergistic action on glycemia, [Stutinsky] 481
- COLD**, exposure, effect of alloxan diabetes on adrenal gland response to, [Shepherd & others] 479
- glycogen synthesis in adipose tissue and, [Engel] 128
- hyperglycemic effect of, [Eroz & others] 308
- COMA**, therapy, [Oakley] 474
- CONSTITUTION**, relation to type of therapy in diabetes, [Meythaler & Loss] 54
- CONVULSIONS**, induced, effect of epinephrine, glucose and certain steroids on, [Vicari & others] 483
- thiosemicarbazide and, [Kadota & Midorikawa] 311
- COPPER**, reagents, in determination of sugars, [Somogyi] 319
- CORONARY THROMBOSIS**, hyperglycemia in, [Ellenberg & others] \*16
- CORTICOSTERONE**: See also Desoxycorticosterone acetate; Desoxycorticosterone glucoside
- CORTICOTROPIN**. See ACTH
- CORTISONE**, diabetogenic effect in rheumatoid arthritis, [Bunim & others] 303
- effect on nephrotic syndrome in diabetics, [Holmes & others] 225
- effect on citrate, calcium, glucose and phosphate levels, [Pincus & others] 315
- effect on resistance to experimental tuberculosis in rats, [Roche & others] 476
- endocrine and nonendocrine diseases and, value, dangers and limitations in, [Simpson] 407
- fatty acid synthesis and, [Gurin] 224
- glucose tolerance tests and, [Bastenie & Kowalewski] 394
- glyconeogenesis due to, effect of ascorbic acid on, [Bacchus & others] 460
- hypoglycemia and, [Schilier & others] 232
- hypoglycemia secondary to islands of Langerhans adenoma and, [Brown & others] 462
- in arthritis, glycosuria and, [Steinbracker & others] 144
- islet-cell tumor of pancreas and, [Smith & Cochran] 407
- metabolic effects, in rheumatoid arthritis, [Brown & others] 303; [Luft & Sjögren] 313
- ocular disease and, [Olson & others] 55
- rheumatoid arthritis and, [Brown & others] 303
- topical, effect on chronic discoid lupus erythematosus, [Newman & Feldman] 55
- topical, effect on necrobiosis lipidica diabetorum, [Newman & Feldman] 55
- unstable juvenile diabetes and, [Schilier & others] 232
- CUSHING'S SYNDROME**, diabetes mellitus and, [Hills & others] \*351
- pyruvic acid blood levels in, [Wildner] 322
- L-CYSTEINE**, alloxan reduction and, [Tipson & Cretcher] 148
- CYSTEINE**, determination, methods, [Fairbridge & others] 129
- development of experimental diabetes and, [Martinez] 471
- effect on diabetogenic action of alloxan, [Sen & Bhattacharya] 479
- thyroidectomy and, effect on sulfhydryl content in tissues, [Martinez] 471
- CYSTINE**, in serum, diabetes and, [Marble & Leech] 136
- CYSTITIS**, diabetes and, [Ramirez Panel] 316
- CYTOCHROME C**, in tissue, arteriosclerosis and, [Mardones & others] 137

D

- DEATHS** Arkin, Harry Samuel, \*84
- Bielby, Katharine Strong, \*168
- Block, Jacob M., \*84
- Bradley, James A., \*339
- Campbell, Leo Kempf, \*423
- Benjamin, Davidson, \*497
- Davis, Reuben, \*255
- Leeper, Edward Paul, \*255
- Ochsenhirt, Norman Charles, \*423
- Rosenberg, Louis Charles, \*168
- Earl W. Shaffer, \*497
- DEHYDRATION**, postoperative glycosuria and, [Elman & Weichselbaum] 308
- DEHYDROACETIC ACID**, inhibitory action of, [Shideman & Rene] 59

DEHYDROASCORBIC ACID, diabetes, effect of adrenalectomy on, [Patterson] 474  
in tissue, effect of scurvy on, [Banerjee & others] 300  
DENTAL CARE, in juvenile diabetes, [Rouques] 58  
DENTAL INFECTIONS, diabetes and, [Knapp & others] 133  
DEPRESSION, diabetes and, electroshock treatment in, [Nordman] 55  
DERMATOPHYTOSIS, diabetes and, [Guy] 224  
DESOXYCORTICOSTERONE ACETATE, metabolic effects, in rheumatoid arthritis, [Luft & Sjögren] 313  
reversal of effect of sodium deficiency on blood and liver glutathione, [Grunert & others] 50  
DESOXYCORTICOSTERONE GLUCOSIDE, effect on blood sugar level of adrenalectomized dogs, [Swingle & others] 481  
DEUTERIUM, influence of amino acids on glycogen formation and, [Terriere & Butts] 147  
DEXTRANS, metabolism, diffusion into urine and lymph, [Grotte & others] 224  
DEXTROSE: See Glucose  
DIABETES: See also Alloxan, diabetes; Brittle diabetes; Diabetes veratrinica; Dithionite, diabetes; Hemochromatosis; Steroid diabetes  
acetone in the breath [Henderson & others] \*188  
acidosis: See also Diabetes, coma acidosis, adrenal cortex activity in, [Rose] 478  
acidosis, adrenal cortex hyperfunction in [Stowers] 145  
acidosis, amino acids in urine and in plasma in, [Gray & Illing] 309  
acidosis, diabetes glomerular nodules and, [Dana & others] 462  
acidosis, diagnosis, [Colwell] 46  
acidosis, free diet in prophylaxis of, [Uhrly & others] 407  
acidosis, hyperglycemia and, [Dana & others] 462  
acidosis, insulin resistance in, [Stowers] 145  
acidosis, management, [Peters] 475  
acidosis, metabolic rate in, [Fisher & Kleiner] 399  
acidosis, metabolism in, [Nabarro & others] 474  
acidosis, oxygen consumption in, [Fisher & Kleiner] 399  
acidosis, potassium in, [Perry] 475  
acidosis, retinal aneurysms and, [Dana & others] 462  
acidosis, steroid excretion and, [Stowers] 145  
acidosis, therapy, [Colwell] 46; [Azerad & Nataf] 460; [Nabarro & others] 473; [Tolstoi] 482  
alcoholism and, vitamin B<sub>12</sub> in, [Menof] 404  
alloxan: See Alloxan, diabetes  
amputation of the lower extremity in [Silbert] \*297  
arthritis and: See Arthritis  
blood cocarboxylase in, effect of insulin on, [Siliprandi & Navazio] 479

blood vessel dysfunction in, effect of Priscoline on, evaluation, [Handelsman & others] 466  
[Book review (Lawrence, R. D.)] 462  
calcification within vas deferens, [Wilson & Marks] 153  
chylomicrons in, [Levy & others] 469  
clinical variations in Ceylon, [DeZoysa] 126  
coma, [Wilson & others] \*34; [Colwell] 46; [Goldner] 50  
coma, diagnosis, [Duncan & Beidleman] 126; [Marble] 470  
coma, family doctor and, [Pease & Cooke] 56  
coma, glucose in, [Greif & Moro] 224; [Oakley] 474  
coma, in children, differential diagnosis from kidney disease, [Root & others] 140  
coma, in children, insulin resistance and, [Root & others] 140  
coma, ketosis and, [Pease & Cooke] 56  
coma, pancreatitis complicated with pseudocyst and, [Rose] 317  
coma, phosphorus in, [Young] 154  
coma, phosphorylation of thiamine in, [Lichtenbelt & Florijn] 312  
coma, potassium in, [Perry & Rosenbaum] 139; [Young] 154; [Perry] 475  
coma, prophylaxis, [Marble] 470  
coma, pyruvate content of blood in, [Lichtenbelt & Florijn] 312  
coma, serum potassium changes in, [Stephens] 480  
coma, statistics, mortality, [Heintzelmann] 467  
coma, therapy, [Young] 154; [Marble] 470; [Tolstoi] 482  
complications: See also specific disease complications, [Ramirez Panel] 316; [Eareckson & Miller] 463  
complications, cutaneous diseases, [Guy] 224  
complications, degenerative: See Diseases, degenerative  
complications, dental infections, prophylaxis, [Knapp & others] 133  
complications, diagnosis, [Clarke] 305; [Duncan & Beidleman] 126  
complications, effect of diet and control of hyperglycemia by insulin on development of, [Anonymous] 460  
complications, NPH insulin and, [Shuman & Francis] 59  
complications, vascular, serum lipoproteins and cholesterol in relation to [Keiding & others] \*434  
complications, vas deferens calcification, [Wilson & Marks] 153  
control, [Blotner & Marble] 124  
control, problems of, [Carr] 45  
coronary thrombosis and, [Ellenberg & others] \*16; [Robinson] 317  
and Cushing's Syndrome [Hills & others] \*351  
cystitis and: See Cystitis  
diagnosis, [Albrink & others] 218; [Berger] 301; [Duncan & Beidleman] 126; [Kramer & others] 53; [Lachance] 312; [Uhrly] 321; [Volk & Lazarus] 149; [Wallace] 408; [Wildner] 322; [Llewellyn] 470; [Reinberg & others] 476

diagnosis, importance, [Clarke] 305  
diagnosis, serum inorganic phosphorus in, [Schneeberg] 232  
diagnosis, sugar tolerance test and, [Blotner & Marble] 124  
disappearance of, during estrogen treatment of associated acromegaly, [McCullagh & others] 472  
education of the diabetic, [Greenlee] 50; [Stetson] 319; [Wyatt] 485  
effect of heparin upon [Engelberg & others] \*425  
emergencies, [Oakley] 474  
employment of [Committee on Employment] \*254 \*336  
endocrine factors in, [Barr] 123  
etiology, [Barr] 123; [Banerjee] 461  
evaluation of self-testing method [Gettling & others] \*194  
experimental, adrenal cortical hormones in [Ingle] \*345  
experimental, amino acid excretion in, [Svec & others] 146  
experimental, effect of adrenal and pituitary excision on liver succinioxidase in, [Wollman & Scow] 154  
experimental, phospholipid synthesis in, [Zilversmit & DiLuzio] 322  
experimental, pituitary gland and, [Editorial] 128  
experimental, plasma-free amino acids in, [Svec & others] 146  
experimental, sulfhydryl content of tissues in, [Martinez] 471  
experimental, sulfonamides in, [Alves] 41  
experimental, transplantation of pancreas tissue and, [Browning & Resnik] 303  
fat metabolism and: See Fat, metabolism  
foot lesions in, surgical prophylaxis, [Miller] 137  
fructose in blood in, [Wallenfels] 322  
gallstones and: See Gallbladder, calculi  
gangrene and: See Gangrene  
gas infection in, [Spring & Kahn] 143  
glomerular nodules in, [Dana & others] 462  
glomerulosclerosis, effect of heparin upon [Engelberg & others] \*425  
group survey of, [Givner] 465  
growth and, [Editorial] 128  
growth hormones and, [Campbell & others] 125  
heart disease and: See Heart, disease  
hepatic glucose output and, [Beam & others] 124  
hepatogenic, differential diagnosis, [Levy & others] 228  
heredity and: See Heredity  
hyalinization of the Islets of Langerhans [Bell] \*341  
hypercholesteremia and, [McMahon & others] 137  
hypercholesteremia and, with hypercholesteremia, [Friedman & others] 400  
hypertension and: See Blood pressure, high  
hyperthyroidism and: See Hyperthyroidism  
hypoglycemic effect of tetraethylammonium and, [Collazo] 126



hypophyseal, *p*-oxypropiofenone in, [Tobiasch] 482  
 incidence: See Diabetes, statistics  
 in industry: See Employment  
 in infants and children, [Brodrick & others] 396; [Lencioni] 312; [Root & others] 140; [Lipp] 469  
 in infants and children, blood vessels and, [Bartels & Poulsen] 124; [Grayzel & Warshall] 131  
 in infants and children, care of, [Lowrey] 53  
 in infants and children, complications, [Engel & others] 399; [Kerr & others] 402; [Lencioni] 312; [Recht] 316  
 in infants and children, degenerative changes in, [Post & Stickle] 57  
 in infants and children, dental care in, [Rouques] 58  
 in infants and children, follow-up study of, [Kerr & others] 402  
 in infants and children, heredity and, [Barker & others] 220  
 in infants and children, implants of Protamine Zinc Insulin in, [Winter & others] 485  
 in infants and children, lipoprotein levels in, [Carr & others] 304  
 in infants and children, problems, [Wagner] 484  
 in infants and children, retinal changes in, [Post & Stickle] 57  
 in infants and children, therapy [Editorial] 307; [Montagnal] 138, 230; [Paniagua & Dominguez] 139; [Sal-dun de Rodriguez] 318; [Schiller & others] 232; [Staffieri & Cardonnet] 319; [Uhry & others] 407  
 inheritance of [Thompson and Watson] \*268  
 intermitten claudication and, [Hera-path] 133  
 juvenile, vascular complications treated with free diet [Larsson & others] \*449  
 kidneys in: See Kidneys  
 labile, anticonvulsant therapy and, [Wilson] 153  
 labile, electroencephalography in, [Wilson] 153  
 laboratory in management of, [White] 485  
 lactate and pyruvate after ingestion of glucose [Hills & others] \*351  
 life insurance for [Montgomery] \*117  
 lipoprotein molecules, cholesterol and atherosclerosis [Barach & Lowy] \*441  
 lymphocyte count in, after glucose administration, [Lazarus & others] 312  
 marriage and, [Thone] 148  
 mental depression and, electroshock therapy, [Nordman] 55  
 mortality: See Diabetes, statistics, mortality  
 myasthenia gravis and, as complications of pulmonary tuberculosis, [Schantz] 478  
 nephritis and: See Nephritis  
 nonsugar carbon in, [Schulitz] 232  
 orthostatic hypotension in, [Levitt & Handelsman] 134  
 osteoporosis and, [Berney] 220

oxygen consumption in, [Horstmann] 226  
 Paget's disease and, [Serre & Mirouze] 479  
 pancreatic, discovery of [Houssay] \*112  
 pancreatic, effect of certain sulfur compounds on, [Houssay & others] 52  
 pancreatic, etiology, experimental work in, [Root & Chen] 478  
 pancreatic, thyroidectomy by radio-iodine and, [Neal & others] 231  
 paralysis of ocular muscles in [Eareckson & Miller] 463  
 pathogenesis, [Lukens] 135  
 phosphorus in serum in, after glucose administration, [Lazarus & others] 312  
 physiopathology, [Barach] 300  
 pituitary gland in: See Pituitary gland  
 plasma insulin level in, [Bornstein & Lawrence] 302; [Editorial] 306  
 plasma potassium level in, [Farber & others] 129  
 pneumaturia in [Spring & Hymes] \*378  
 pregnancy in: See Pregnancy  
 pruritus and: See Pruritus  
 psoriasis and: See Psoriasis  
 psychological aspects of, [Smith] 143  
 in Puerto Rico [Paniagua and Vizcar-rondo] \*373  
 in Puerto Rico, campaign against, [Editorial] 306  
 residual carbon in, [Schulitz] 232  
 retinitis: See Retinitis  
 retinopathy: See Retinopathy  
 riboflavin elimination in, [Travia & others] 482  
 role of alloxan in, [Seligson & Seligson] 59  
 role of ketone bodies in diabetic coma [Fisher] \*108  
 serum cystine and, [Marble & Leech] 136  
 serum lipoproteins and cholesterol in relation to vascular complications [Keiding & others] \*434  
 serum protein fractions in, [Waife & others] 321  
 severe, therapy, [Lobo Onell] 402  
 sex and: See Sex  
 The song of, a poem [Striker] \*492  
 statistics, age of onset, longevity and, [Joslin] 227  
 statistics, in Canada, [Editorial- W. R. Feasby] 307  
 statistics, incidence, in Italy, [Foreign Letters] 222  
 statistics, incidence, in Newmarket, Ontario, [Kenny & others] 52  
 statistics, incidence, in Rhode Island, [Kramer & others] 53  
 statistics, incidence, in West Germany, [Graf] 50  
 statistics, incidence, review, [Blotner & Marble] 124  
 statistics, mortality, Denmark, [Heint-zelmann] 467  
 statistics, mortality from [Dublin & Marks] \*205  
 statistics, in Tunisia, [Cohen] 126  
 stress and, [Hinkle & Wolf] 310; [An-notations] 459  
 surgery in: See Surgery

surveys, [Clarke] 305  
 testosterone propionate and, effect on responsiveness to insulin, [Zimmer-man & others] 235  
 therapy, [Arduino] 393; [Arduino & Vieira da Silva] 218; [Buttarni & Baronchelli] 396; [Duncan] 306; [Editorial] 47; [Engelson] 399; [Lobo Onell] 126; [Miller] 54; [Murdock] 139; [Osio] 314; [Paniagua & Dominguez] 139; [Procopio] 316; [Queries & Minor Notes] 405; [Uhry] 321  
 therapy: See also Insulin  
 therapy, [Book review (Lawrence, R. D.)] 462  
 therapy, Caalla Composita, [Medical Forum (Chicago)] 54  
 therapy, carbohydrate metabolism and, [Van Buchem & Nieveen] 483  
 therapy, constitutional bases for, [Meyt-haler & Loss] 54  
 therapy, in atomic bomb emergency, [Anonymous] 300  
 therapy, in general practice, [Baum-gartner] 42; [Bondy] 395; [Gates] 130; [MacNeal] 135; [Megevand] 404; [Bauman] 461  
 therapy, insulin allergy and, [Herold] 310  
 therapy, in office, [Llewellyn] 470  
 therapy, in wartime emergency, [Editorial] 306  
 therapy, management of, [Sienknecht] 143; [Stetson] 319; [Robertson] 476  
 therapy, "Pancreasmellin-Neu" in, [Mohnik] 230  
 therapy, phosphoric esters of thiamin in, [Montes] 404  
 therapy, review, [Greenlee] 50  
 therapy, vitamin B<sub>12</sub> in, [Menof] 404  
 tuberculosis and: See Tuberculosis  
 types, [Editorial] 128, 307  
 uncontrolled, [Sherrill] 233  
 undiagnosed, [Editorial] 127  
 vascular changes in, optic neuritis and, [Carroll] 304  
 vascular disease in: See Blood vessels  
 DIABETES, new publication, [Editorial] 398  
 Looks Ahead [Editorial] \*62  
 magazine, First Year of [Editorial] \*487  
 magazine, The Mention of [Editorial] \*489  
 DIABETES ASSOCIATION, England, [Lawrence] \*420  
 DIABETES DETECTION DRIVE, [Editorial] 47, 128  
 1950 results, [Kramer & others] 53  
 in Dayton, Ohio, [Sharkey] 143  
 in New Haven, Connecticut, results, [Albrink & others] 218  
 national, [Sharkey] 143  
 DIABETES AND BASIC METABOLIC PROBLEMS, postgraduate course, in, program \*494  
 DIABETES VERATRINICA, etiology, [Collazo] 126  
 DIABETIC FAIR, [Blotner & Marble] 124  
 DIABETIC SERUM, ultracentrifugal studies on [Hanig & Laufer] \*447  
 DIABETICS, summer camp for children [Marble] \*245



DIALURIC ACID, alloxan reduction and, [Tipson & Cretcher] 148  
 DIASTASE, in serum, cancer of the pancreas and, [Brown & others] 396  
 in urine, acute pancreatitis diagnosis and, [Tseng & others] 148  
 DIBENAMINE, alloxan diabetes and, [De Oya & others] 47  
 DIET, carbohydrate, alloxan diabetes incidence and, [Rodriguez & Krehl] 477  
 carbohydrate, diabetes and, [Rodriguez & Krehl] 232  
 carbohydrate, glucose metabolism and, [Hansen & others] 132  
 controlled vs. free management [Wilson & others] \*33  
 diabetic, [Greenlee] 50; [Pennock] 56; [Sienknecht] 143  
 diabetic, calculation, [Beaser] 220  
 diabetic, free: See Diet, diabetic, unrestricted  
 Diabetic, "Free Diet" for [Editorial, Guest & Marble] \*487  
 diabetic, "Free Diet," degenerative vascular complications in juvenile diabetes treated with [Larsson & others] \*449  
 diabetic, low-carbohydrate, [Queries & Minor Notes] 405  
 diabetic, unrestricted, [Editorial] 48; [Forsyth & others] 48, 222; [Uhry & others] 407  
 diabetic, unrestricted, dangers of, [Sherrill] 233  
 effect on cataract development in diabetes, [Anonymous] 460  
 fat, alloxan diabetes incidence and, [Rodriguez & Krehl] 477  
 fat, diabetes and, [Johnson & Rynerson] 52; [Rodriguez & Krehl] 232  
 fat, glucose metabolism and, [Hansen & others] 132  
 hyperglycemia and, [Forsyth & others] 48  
 low-carbohydrate, weight losses and, [Cederquist & others] 304  
 low-fat, serum cholesterol and, [Hildreth & others] 133  
 low-fat, blood lipid levels in multiple sclerosis, [Wilmot & Swank] 235  
 low-fat, weight losses and, [Cederquist & others] 304  
 proteins, alloxan diabetes incidence and, [Rodriguez & Krehl] 477  
 protein, diabetes and, [Rodriguez & Krehl] 232  
 protein, fatty metamorphosis of liver associated with pancreatic calcification and, [Sharp & others] 406  
 reducing, [Cederquist & others] 304  
 DIENESTROL, diabetes and, [Rodriguez] 476  
 DIETHYLSTILBESTROL, diabetes and, [Rodriguez] 476  
 DIHYDROERGOCORININE, effect on blood sugar level in insulin-treated, alloxan-diabetic rats, [Shepherd & Buchanan] 479  
 DIPHENYLTHIOCARBAZONE, diabetic-ogenic action [Root & Chen] 478  
 DI-INSULIN, diabetes and, in outpatient clinic, [Megevand] 404  
 DI-INSULIN NOVO, action, duration, [Gerritzen] 309  
 diabetes and, [Feiler] 222

2, 4-DINITROPHENOL, effect on anaerobic glycolysis in cerebral cortex slices, [Peiss & others] 231  
 DISEASES, degenerative, diabetes and, [Root] 317  
 DITHIZONE, diabetes, damage to islands of Langerhans in, [Wolff & others] 235  
 diabetes, zinc content of islands of Langerhans and, [Stampf & others] 233; [Wolff & others] 235  
 DIURESIS, stress and, in diabetes, [Hinkle & others] 51; [Annotations] 459  
 DREYWOOD'S ANTHRONE REAGENT, blood sugar determination and, [Green & Wade] 400

# E

EDEMA, intercapillary glomerulohyalinosis in diabetics and, [Azeraad & others] 394  
 ELECTRIC SHOCK, in diabetes with mental depression, [Nordman] 55  
 ELECTROCARDIOGRAM, hypopotassemia in diabetic coma and, [Perry] 475  
 plasma potassium concentration and, [Abrams & others] 218  
 QT prolongations and, diagnostic significance, [Bellet & Finkelstein] 43  
 ELECTROLYTES, balance, diabetes coma and, [Goldner] 50  
 deficiencies, glutathione levels and, [Grunert & others] 50  
 disturbances, QT prolongation and, [Bellet & Finkelstein] 43  
 effect of glucose on, in adrenalectomized rat, [Dury] 463  
 loss, diabetic acidosis and, [Nabarro & others] 473  
 in pancreas, excretion of, [Hildes & others] 401  
 ELECTROPHORETIC ANALYSIS, of serum and urinary proteins [Rifkin & Petermann] \*28  
 EMPLOYMENT, diabetes and, [Rabinowitch] 475  
 ENDOCRINE GLANDS, carbohydrate metabolism and, [Editorial] 47  
 disorders, carbohydrate metabolism and, [Davidson] 46  
 disorders, diabetes and, [Davidson] 46  
 disorders, obesity and, [Kasten] 401  
 overactivity, endocrine therapeutics and, [Simpson] 407  
 overactivity, in diabetes, [Barr] 123  
 ENERGY, metabolism, reducing diets and, [Cederquist & others] 304  
 ENZYMES, action, on tuberous carbohydrates, [Edelman & Bacon] 127  
 activity, metabolic changes and, in alloxan diabetes, [Copenhaver & others] 305  
 activity, testing, [Haanes & Gyorgy] 51  
 pancreatic in duodenal contents of kwashiorkor patients, [Thompson & Trowell] 481  
 phosphate acceptors, control of pyruvate oxidation in heart preparation, [Rabinovitz & others] 140  
 potato, synthesis of starch and, [Gilbert & Patrick] 400

proteolytic plant, fatty liver prophylaxis in insulin-treated, depancreatized dogs, [Feinberg & others] 464  
 transfructosidation by, [Edelman & Bacon] 127  
 ENZYME SYSTEMS, carbohydrate metabolism and, [Hackedorn] 131  
 hydrolytic, from *Helianthus tuberosus* L., action on carbohydrates present in the tubers, [Edelman & Bacon] 127  
 EOSINOPENIA, insulin administration and, [Jacobs & others] 468  
 insulin sensitively and, [Pfeiffer & others] 315  
 EOSINOPHILIA, insulin and, [Lawrence] 469  
 EOSINOPHILS, count, effect of insulin stress in normals and diabetics, [Pfeiffer & others] 315  
 level, effect of insulin and relation to hypoglycemia response, [Volk & Lazarus] 483  
 response to ACTH in newborn infants, [Wolman] 485  
 EPILEPSY, diabetes and, in children, [Engel & others] 399  
 EPINEPHRINE: See also Arterenol (norepinephrine)  
 adrenal cortex response to insulin and, [Vogt] 149  
 blood sugar control and, [Editorial] 48  
 effect on alloxan action, [De Oya & others] 47  
 effect on blood sugar and liver glycogen in animals with cooled body temperatures, [Eroz & others] 308  
 effect on citrate, calcium, glucose and phosphate levels, [Pincus & others] 315  
 effect of glucose on electrolyte and water concentration after pretreatment with, [Dury] 463  
 hyperglycemia-induced, effect of adrenergic blocking drugs on, [Komrad & Loew] 228  
 hyperglycemia-induced, peripheral glucose assimilation and, [Somogyi] 233  
 effect on induced convulsions, [Vicari & others] 483  
 plasma potassium and, [Dury] 127  
 ERGONOVINE, suppression of epinephrine-induced hyperglycemia and, [Harvey & others] 466  
 ERGOTAMINE TARTRATE, effect on blood sugar level in insulin-treated, alloxan-diabetic rats, [Shepherd & Buchanan] 479  
 ERYTHEMA, allergy to insulin and, [Blandi] 302  
 ERYTHROCYTES, glucose permeability to, [Yang] 154  
 glucose utilization in, [Weller & Taylor] 485  
 hexokinase activator in, [Weil-Malherbe & Bone] 151  
 effect of insulin on phosphate uptake by, [Gourley] 465  
 potassium exchange in, [Weller & Taylor] 485  
 sedimentation rate, growth hormone and, [Campbell & others] 125  
 ESTRADIOL, diabetes and, [Rodriguez] 476

- effect on induced convulsions, [Vicari & others] 483
- ESTROGENS, action, in experimental diabetes, [Houssay] 51
- diabetes and, [Rodriguez] 476
- disappearance of diabetes during treatment of acromegaly and, [McCullagh & others] 472
- ESTRONE, diabetes and, [Rodriguez] 476
- ETHIONINE, effect on pancreas, [Goldberg & Chaikoff] 49
- production of experimental pancreatitis with, [Lopes de Almedia & Grossman] 403
- ETHYL ALCOHOL, effect on external secretion of pancreas, [Dreiling & others] 398
- ETHYL ESTRADIOL, diabetes and, [Rodriguez] 476
- ETHYL TESTOSTERONE, diabetes and, [Rodriguez] 476
- EVISCERATION, renal glyconeogenesis and, [Saugman] 232
- EXERCISE, diabetes and, [Greenlee] 50
- tolerance test, obliterating peripheral arteriosclerosis and, [Texter & others] 148
- EXTON-ROSE TEST, glycosuria and, [Moyer & Womack] 138
- EXTREMITIES, diabetic gangrene, surgery of, [Oakley] 231
- EYES, diabetes and, [Duncan & Beidleman] 127
- disease, therapy, [Olson & others] 55

## F

- FAT, body composition, and, [editorial Murphy] \*410
- degeneration, vitamin B<sub>12</sub> in, [Menof] 404
- in liver, in alloxan-diabetic rats with ketoacidosis, [Knowles & Guest] 468
- metabolism, diabetes and, [Levy & others] 469
- metabolism, effect of heparin on chylomicra, [Swank & Wilmot] 146
- metabolism, in diabetes and thyrotoxicosis, testosterone propionate and, [Kinsell & others] 227
- parenteral administration of, lipomycronemia and, [Ermala & others] 129
- protein metabolism and, [Munro] 138
- synthesis, by mammary gland, insulin effect on, [Balmann & Folley] 219
- synthesis, from carbohydrate, thiamine deficiency and, [Gruber] 224
- FATTY ACIDS, glucose synthesis from, [Strisower & others] 146
- oxidation, [Beatty & West] 43
- synthesis, [Gurin] 224
- synthesis, in diabetic liver, effect of fructose on, [Baker & others] 461
- FEAR, acute and chronic, effect on gastric acidity, heart rate, and blood sugar levels in monkeys, [Mahl] 470
- FERMENTATION, pentoses and uronic acids and, by bacteria from rumen, [Heald] 310
- FETUS, diabetic pregnancy and, [Hall & Tillman] 132; [Petrick] 231
- effect of insulin hypoglycemia on, [Hicks] 467
- effect of Protamine Zinc Insulin on, [Lichtenstein & others] 313

- FICIN, fatty liver prophylaxis in insulin-treated, depancreatized dogs, [Feinberg & others] 464
- FLUIDS, balance, diabetic coma and, [Goldner] 50
- oral, diabetic acidosis and, [Tolstoi] 482
- parenteral, diabetic acidosis and, [Tolstoi] 482
- peritoneal, amylase content of, after pancreatic trauma, [Scott & Harkins] 318
- FOLIN-WU METHOD, blood sugar determination by, prevention of color fading in, [Lehmann & Silk] 469
- FOOD, intake, effect of hyperglycemia and hypoglycemia on, [Mayer & Bates] 472
- low-carbohydrate, [Queries and Minor Notes] 405
- FOOT, diabetes and, care of, [Carr] 45
- infections, in diabetes, penicillin ointment in, [Jablonsky] 226
- lesions, in diabetes, [Miller] 137
- FRUCTOSE, effect on blood pyruvic acid, [Miller & others] 404
- effect on plasma citric acid, [Miller & others] 404
- effect of brain extracts on phosphorylation of, [Weil-Malherbe & Bone] 151
- in blood, [Wallenfels] 322
- liberation of, by hydrolytic enzymes, [Edelman & Bacon] 127
- metabolism, in liver, diabetes and, [Craig & others] 462
- metabolism, in normal and diabetic subject, [Miller & others] 404
- phosphorylation, by fructokinase, [Staub & Vestling] 144
- tolerance after intravenous infusion of invert sugar, [Weinstein] 152
- transference of, [Edelman & Bacon] 127
- FRUCTOSE-1-PHOSPHATE, isolation of, [Staub & Vestling] 144
- FRUCTOSE-6-PHOSPHATE, conversion of glucose-6-phosphate to, by human placenta, [Wajzer & Zelnik] 149
- FRUCTOKINASE, rat liver, fructose phosphorylation and, [Staub & Vestling] 144
- FUNDUS OCULI, in juvenile diabetes, [Pitsky & others] 57
- FURUNCULOSIS, diabetes and, [Guy] 224

## G

- GALACTOSE, cataract formation and, [Sterling & Dav] 319
- GALACTOSEMIA, congenital, symptoms and management, [Pitt] 231
- GALACTOSE, metabolism, diabetes and, [Aslev] 459
- GALLBLADDER, calculi, incidence in diabetes, [Lieber] 313
- in chronic relapsing pancreatitis with recurrent jaundice, [Selesnick] 479
- disease, pancreatitis and, [Rose] 140
- inflammation, diabetes and, [John] 226
- inflammation, hypercholesterolemia and, [McMahon & others] 137
- surgery, effect on carbohydrate metabolism, [John] 226
- GALLSTONES: See Gallbladder, calculi

- GANGRENE, diabetic, therapy, [Grunberg & others] 224; [Oakley] 231; [Samuels] 232; [Shute & Shute] 318; [Proud] 475
- GASTRO-INTESTINAL DRAINAGE, acute pancreatitis and, [Gage & Gillespie] 49
- GLOBIN INSULIN, action, duration, [Gerritzen] 309
- diabetes and, [Duncan] 306
- GLOBIN ZINC INSULIN, assay, by fibril formation and precipitation, [Foster & others] 308
- British standard for, [British Insulin Manufacturers' Biological Sub-Committee and the Dept. of Biological Standards, National Institute for Medical Research] 462
- comparison with other insulins, in severe diabetes, [Sugar & Alpert] 146
- GLOBULIN, gamma, from insulin-resistant patient, insulin-neutralizing activity of, [De Filippis & Iannoccone] 463
- in serum, diabetes and, [Waife & others] 321
- GLOMERULAR NODULES, diabetes and, [Dana & others] 462
- GLOMERULOSCLEROSIS, serum and urinary proteins in, [Rifkin and Petermann] \*28
- GLOUCESTER DIABETES STUDY, [Getting and others] \*194
- GLUCOSE, absorption, from duodenum, steatorrhea and, [Taylor & Wightman] 481
- absorption, glycemic level and, [Lourau & Lartigue] 229
- absorption, in kidneys, determination, [Pitesky & others] 57
- absorption, by stomach and intestines of pure strain mice, [Fenton & others] 464
- action, on acid soluble phosphorus compounds in the blood, [Kvamme] 228
- acute pancreatitis and, [Gage & Gillespie] 49
- administration, in diabetics, effect on lymphocytes and serum inorganic phosphorus, [Lazarus & others] 312
- assimilation, adrenalin hyperglycemia and, [Somogyi] 233
- in body fluids, spectrophotometric analysis of, [Zipf] 486
- changes in electrolyte and water composition and, [Dury] 463
- determination, methods, [Fairbridge & others] 129
- diabetic acidosis and, [Tolstoi] 482
- diabetic coma and, [Goldner] 50; [Grief & Moro] 224; [Oakley] 474
- diffusion across blood-aqueous barrier, insulin and, [Ross] 318
- effect on blood pyruvic acid, [Miller & others] 404
- effect on blood sugar level, [Nath & Sahu] 474
- effect on induced convulsions, [Vicari & others] 483
- effect on plasma citric acid, [Miller & others] 404
- excretion, stress and, [Hinkle & Wolf] 310
- fermentation, by bacteria from sheep rumen, [Heald] 310

formation, [Segaloff & Many] 142  
 glycogen synthesis from, [Creasey & Gray] 397  
 hyperglycemia produced by, effect on food intake, [Mayer & Bates] 472  
 hypoglycemic coma and, [Oakley] 474  
 in blood, effect of diuresis in diabetes on, [Hinkle & others] 51  
 in liver, fructose and, [Craig & others] 462  
 metabolism, diabetes and, [Alslev] 459  
 in plasma, determination, [Pitesky & others] 57  
 insulin and, effect on volume distribution, [Drury & Wick] 47  
 insulin, and, reactions, [Schwartz & Lea] 406  
 insulin and, volume of distribution of, [Wick & others] 152  
 insulin secretion and, [Mackler & others] 135  
 in tears, [Giardini & Roberts] 49  
 in urine, effect of diuresis in diabetes on, [Hinkle & others] 51  
 level of, effect of drugs on, [Pincus & others] 315  
 loss, stress diuresis and, [Hinkle & others] 51  
 lymphatic leukemia and, [Gitman & others] 131  
 lymphocyte response to, in diabetes, [Lazarus & others] 134  
 metabolism, effect of diet on, [Hansen & others] 132  
 metabolism, by cerebral cortex, electrical stimulation and, [McIlwain & others] 230  
 metabolism, by rat diaphragm muscle, [Villev & others] 321  
 metabolism, in alloxan diabetes, [Stetten & Stetten] 145  
 metabolism, in liver, insulin and, [Bearn & others] 220  
 metabolism, in normal and diabetic subject, [Miller & others] 404  
 metabolism, insulin and, [Drury & others] 47  
 oxidation, by glucose oxidase, [Keilin & Hartree] 402  
 oxidation, in alloxan diabetes, [Stetten & others] 145  
 permeability to erythrocyte, [Yang] 154  
 phosphate excretion and, [Lips] 135  
 phosphorylation, by human placenta, to fructose, [Wajzer & Zelnik] 149  
 phosphorylation, reactions occurring in rat extract during, [Weil-Malherbe & Bone] 150  
 production, in alloxan diabetes, [Stetten & others] 145  
 protein conversion to, [Bancroft & Drury] 41  
 pyruvate metabolism in *Lactobacillus arabinosus* and, [Nossal] 314  
 synthesis, fatty acids in, [Strisower & others] 146  
 synthesis, kidney and, in eviscerated dogs, [Mackler & others] 313  
 tolerance, acidosis and, [Mackler & others] 229  
 tolerance, after intravenous infusion of invert sugar, [Weinstein] 152  
 tolerance, age and, [Scow & Foglia] 142

tolerance, curve, [Abrahamson] 218  
 tolerance test, [editorial] \*60  
 tolerance, effect of sulfonamides on, in experimental diabetes, [Alves] 41  
 tolerance, glycosuria and, [Moyer & Womack] 138  
 tolerance, potassium deficiency and, [Fuhrman] 130  
 tolerance, pregnancy in diabetes and, [Pedersen] 405  
 tolerance, rheumatoid arthritis and, adrenocortical hormones and, [Bunim & others] 304  
 tolerance, sex and, [Scow & Foglia] 142  
 tolerance, tests, age and, [Schneeberg & Fineston] 318  
 tolerance, tests, corticotropin and, [Bergner] 301  
 tolerance, tests, cortisone and, [Bastenie & Kowalewski] 394  
 tolerance, tests, diabetes and, [Bastenie & Kowalewski] 394; [Soskin] 143; [Wilder] 322; [Reinberg & others] 476  
 tolerance, tests, evaluation, [Moyer & Womack] 138  
 tolerance, tests, in alloxan-treated rats, glucose-1-phosphate administration and, [Keuther] 134  
 tolerance, tests, indications, [Duncan & Beidleman] 127  
 tolerance, tests, insulin and, [Volk & Lazarus] 149  
 tolerance, tests, insulin and, estimation of insulin sensitivity by, [Lazarus & Volk] 469  
 tolerance, tests, in normal people, [Mukherjee & others] 473  
 tolerance, tests, intravenous, evaluation, [Soskin] 143  
 tolerance, tests, liver disease and, [Bastenie & Kowalewski] 394  
 tolerance, tests, oral, evaluation, [Soskin] 143  
 tolerance, thyroidectomy and, [Scow & Foglia] 142  
 uptake, effect of insulin on, in rat diaphragm, [Walaas & Walaas] 407  
 utilization, effect of concentration in extracellular fluid, [Wick & Drury] 152  
 utilization by erythrocyte, [Weller & Taylor] 485  
 utilization, effect of insulin on, [Groen & others] 401  
 utilization, in hepatectomized dogs, [Mackler & others] 135  
 utilization by tissues, [Long] \*5  
 GLUCOSE OXIDASE, a- and b-glucose oxidation and, [Keilin & Hartree] 402  
 GLUCOSE-6-PHOSPHATASE, activity, in muscle, [Villev & others] 321  
 GLUCOSE-1-PHOSPHATE, tolerance, in alloxan-treated rats, [Keuther] 133  
 GLUCOSE-6-PHOSPHATE, oxidation, by enzymes, [Dickens & Glock] 398  
 transformation to fructose-6-phosphate, by human placenta, [Wajzer & Zelnik] 149  
 GLUCURONIC ACID, fermentation, by bacteria from sheep rumen, [Heald] 310  
 GLUTAMIC ACID, acidosis and, [Beatty & West] 42

GLUTATHIONE, alloxan reduction and, [Tipson & Cretcher] 148  
 in blood, deficiency, mechanism, [Grunert & Phillips] 51  
 in blood, determination, [Thompson & Watson] 320  
 in blood, determination, amperometric titration and, [Bidmead & Watson] 301  
 in blood, diabetes and, [Thompson & Watson] 320  
 in blood, effect of insulin on, [Binkley & others] 124  
 in blood, effect of protein deficiency on, [Edwards & Westerfield] 464  
 in blood, effect of stress and adrenocorticotrophic hormone on, [Grunert & Phillips] 51  
 in blood, electrolyte deficiency and, [Grunert & others] 50  
 in kidney, effect of stress and adrenocorticotrophic hormone on, [Grunert & Phillips] 51  
 in liver, effect of insulin on, [Binkley & others] 124  
 in liver, effect of protein deficiency on, [Edwards & Westerfield] 464  
 in liver, effect of stress and adrenocorticotrophic hormone on, [Grunert & Phillips] 51  
 in tissue, alloxan action and, [Brada] 45  
 in tissue, effect of scurvy on, [Banerjee & others] 300  
 metabolism, effect of insulin on, [Binkley & others] 124  
 relation to diabetogenic effect of adrenal steroids [Lazarow] \*171  
 GLYCEMIA: See Hyperglycemia  
 GLYCOGEN, breakdown, in the chicken, [Szepsenwol & Michalski] 147  
 formation, amino acids and, [Terriere & Butts] 147  
 in heart, diabetes and, [Mowry & Bangle] 230  
 in liver: See Liver, glycogen  
 in tissue determination, Van der Kleij] 234  
 intravenous infection of, effects, [Bloom] 44  
 storage disease of heart, [Mowry & Bangle] 230  
 synthesis, by rat diaphragm muscle, [Villev & others] 321  
 synthesis, enzymes of adipose tissue concerned in, [Creasey & Gray] 397  
 synthesis, in adipose tissue, [Engel] 128  
 synthesis, insulin and, [Villev & others] 321  
 GLYCOGENOLYSIS, inhibition of, alloxan and, [Kepinov] 311  
 in the chicken, [Szepsenwol & Michalski] 147  
 GLYCOGENOLYTIC FACTOR, liver glycogen and, [Sokal] 480  
 GLYCOGENOGENESIS, cortisone-induced, effect of ascorbic acid on, [Bacchus & others] 460  
 GLYCOLYSIS, anaerobic, in cerebral cortex slices, 2, 4-dinitrophenol and, [Peiss & others] 231  
 inhibition by acidosis [Guest and others] \*279



**GLYCOSURIA**, ACTH in arthritis and, [Steinbracker & others] 144  
 blood sugar and, correlation in diabetic control, [Fraser] 464  
 cancer of the pancreas and, [Brown & others] 396  
 cortisone in arthritis and, [Steinbracker & others] 144  
 diabetes and, Priscoline in, [Sasson] 58  
 diabetes and, salicylates in, [Bornstein & others] 302  
 diabetic acidosis and, renal losses of water, sodium and chloride, [Nabarro & others] 474  
 effect on cataract development in diabetes, [Anonymous] 460  
 glucose tolerance and, [Moyer & Womack] 138  
 in alcoholic with hepatic insufficiency, [Leevy & others] 228  
 phosphate excretion and, [Levitan] 53; [Levitan & Stead] 134  
 phosphate reabsorption and, [Levitan] 53; [Levitan & Stead] 134  
 renal, development of diabetes mellitus from, [Grafe & Hering] 465  
 rheumatoid arthritis and, therapy, [Bunim & others] 304  
 effect of salicylate on, in alloxan-diabetic rat, [Smith & others] 480  
 surgery and, [Elman & Weichselbaum] 308  
**GOITER**: See Hyperthyroidism  
**GONADECTOMY**, alloxan diabetes and, [Beach & others] 461  
**CONADOTROPIN**, *p*-hydroxypropionephone and, [Brady & Hedges] 395  
**GOUT**, insulin hypoglycemia in therapy of, [Weitzner] 484  
 Paget's disease and, [Serre & Mirouze] 479  
**GROWTH**, diabetes and, [Editorial] 128  
 metabolism and, [Maassen] 313  
**GROWTH HORMONE**, blood sugar and, [Editorial] 48; [Maassen] 313  
 diabetogenic action, [Engel & others] 399; [Reid] 57, 316  
 diabetogenic action, fetal mortality and, [Barns & others] 42  
 differentiation from diabetogenic factor of pituitary, [Raben & Westermeyer] 475  
 effect in various clinical fields, [Simpson] 407  
 effect on pancreatic islets, [Bornstein & others] 124  
 erythrocyte sedimentation rate and, [Campbell & others] 125  
 etiology of experimental diabetes and, [Young] 154  
 experimental diabetes and, [Campbell & others] 125  
 fatty acid synthesis and, [Gurin] 224  
 hyperglycemia and, [Bornstein & others] 124  
 hyperinsulinism and, [Black & others] 302  
 insulin and, in nitrogen balance, [Milman & others] 54  
 insulin resistance and, [Lukens] 135  
 pancreatropic effect of, [Maassen] 313

# H

**HEART**, disease, diabetes and, [Kerr & others] 402; [Ramirez Panel] 316  
 disorders, diabetes and, mortality, [Heintzelmann] 467  
 failure, plasma potassium level and, [Farber & others] 129  
 glycogen, diabetes and, [Mowry & Bangle] 230  
 glycogen, dietary potassium deprivation and, [Seifter] 143  
 glycogen, histochemical study of, [Mowry & Bangle] 230  
 glycogen storage disease, [Mowry & Bangle] 230  
 lesions, alloxan diabetes and, [Mann & others] 230  
 output, effect of potential vasodilators on, [Sayen & others] 406  
 rate, effect of acute and chronic fear on [Mahl] 470  
 rate, in insulin hypoglycemia, effect of SKF 501 on, [Meilman & Altschule] 472  
**HELIANTHUS TUBEROSUS** L., hydrolytic enzyme system from, action on carbohydrates present in tubers, [Edelman & Bacon] 127  
**HEMOCHROMATOSIS**, diabetes and, [Marble & Bailey] 136  
**HEMOGLOBIN**, level, hypoxia and, [Stickney & others] 480  
**HEMOLYTIC DISEASE**, infants and, blood sugar level in, [Gerrard] 222  
**HEPARIN**, arteriosclerosis and, [Graham & others] 131  
 effect on blood lipids in arteriosclerosis, [Graham & others] 131  
 effect of diabetes upon [Engelberg & others] \*425  
 effect on metabolism of chylomicra, [Swank & Wilmot] 146  
 effect on serum lipoproteins, [Jones & others] 227  
 lipemia and, [Swank & Wilmot] 146  
 lipoprotein metabolism and, [Anfinsen & others] 393; [Graham & others] 131  
**HEPATECTOMY**, experimental, procedure, [Ranney & others] 57  
**HEPATITIS**, fructose in blood in, [Wal-lenfels] 322  
 pancreatitis and, [Rqse] 140  
**HEREDITY**, diabetes and, [Bartels] 42; [Cohen] 126; [Harris] 225; [Thone] 148; [Watson & Thompson] 150; [Thompson & Watson] \*268; [Editorial, Wilder] \*323; [Steinberg & Wilder] 480  
**HEXOFURANOSE**, hexopyranose and, hexokinase activation of muscle and, Weil-Malherbe & Bone] 151  
**HEXOKINASE**, activity, erythrocyte factor and, [Weil-Malherbe & Bone] 151  
 activity, tissue homogenates and, glucose utilization and, [Long] 229  
 effect on glycogen synthesis from adipose tissue, [Creasey & Gray] 397  
 insulin and, [Villev & others] 321  
 transfer, in control of pyruvate oxidation in heart preparation, [Rabinovitz & others] 140  
 Michaelis constant of, [Weil-Malherbe & Bone] 150

**HEXOPYRANOSE**, hexofuranose and, hexokinase activation of muscle and, [Weil-Malherbe & Bone] 151  
**HGF**, dermal reactions to insulin and, [Grieve & others] 310; [Paley] 315  
 in insulin, determination, [Rowlinson] 318  
 in pancrease, Rodriguez-Candela] 317  
**HIMSWORTH GLUCOSE-INSULIN TOLERANCE TEST**, estimation, of insulin sensitivity by, [Lazarus & Volk] 469  
**HORMONES**, carbohydrate metabolism and, [Hackedorn] 131  
 cholesterol synthesis and, [Gurin] 224  
 diabetic pregnancy and, [Fouracre Barns & Morgans] 399  
 fatty acid synthesis and, [Gurin] 224  
 growth See Growth hormone  
 imbalance, diabetes and, [Barach] 300  
**HOUSSAY PHENOMENON**, in man [Williams] \*37  
 in man [correspondence, D. Hurwitz] \*331  
**HYDERGINE**, effect on blood sugar level in insulin-treated, alloxan-diabetic rats, [Shepherd & Buchanan] 479  
**HYDROGEN SULFIDE**, alloxan reduction and, [Tipson & Cretcher] 148  
*p*-**HYDROXYPROPIOPHENONE**, effect in exophthalmic goiter associated with diabetes, [Brady & Hedges] 395  
 effect on insulin requirements in diabetes, [Brady & Hedges] 396  
**8-HYDROXYQUINOLINE**, diabetogenic action, [Root & Chen] 478  
**HYPERADRENALISM**, hyperthyroidism and, [Dailey & Benson] 305  
**HYPERCHOLATEMIA**, hypercholesteremia and, in various conditions, [Friedman & others] 400  
**HYPERCHOLESTEREMIA**, [McMahon & others] 137  
 bile acid accumulation after biliary obstruction and, [Friedman & Byers] 400  
 hypercholatermia and, in various conditions, [Friedman & others] 400  
 pathogenesis, [Friedman & others] 400  
**HYPERGLYCEMIA**, acute pancreatitis diagnosis and, [Tseng & others] 148  
 brittle diabetes and, [Schwab] 142  
 cancer of the pancreas and, [Brown & others] 396  
 in coronary thrombosis [Ellenberg & others] \*16  
 in depancreatized dogs, [Weigen & others] 484  
 diabetic retinitis and, [Dana & others] 305  
 differential diagnosis, [Hamwi & von Haam] 132  
 epinephrine induced, effect of adrenergic blocking drugs, [Komrad & Loew] 228  
 epinephrine induced, peripheral glucose assimilation and, [Somogyi] 233  
 epinephrine-induced, suppression of [Harvey & others] 466  
 ether, effect of morphine and pentobarbital on, [Watts] 235  
 experimental, etiology, [Kadota & Midorikawa] 311  
 growth hormone and, [Bornstein & others] 124



- in alcoholic with hepatic insufficiency, [Levy & others] 228  
in rheumatoid arthritis, adrenocortical hormones and, [Bunim & others] 304  
insulin and, effect on development of cataracts in diabetes, [Anonymous] 460  
insulin production and, [Lukens] 135  
kidneys and, [Cohn & others] 46  
phosphate excretion and, [Levitan] 53; [Levitan & Stead] 134  
phosphate reabsorption and, [Levitan] 53; [Levitan & Stead] 134  
relationship to pathological physiology of diabetes, [Forsyth & others] 49  
retinal aneurysms in diabetes and, [Dana & others] 462  
sedimentation rate and, [Campbell & others] 125  
synergistic action of several substances on, [Stutinsky] 481  
vascular complications and, [Forsyth & others] 49  
veratrin sulfate and, [Collazo] 126  
**HYPERGLYCEMIC FACTOR**, in urine, psychotics and, [Walker & Mayer-Cross] 150  
in urine of schizophrenics, methods of concentrating, [Morgan & Pilgrim] 473  
**HYPERGLYCEMIC GLYCOGENOLYTIC factor**: See HGF  
**HYPERINSULINISM**: See also Hypoglycemia  
Hyperinsulinism, [Wilder] \*184  
brain phospholipid and, [McGhee & others] 54  
islet-cell adenoma and, [Whipple] 408  
rheumatoid arthritis and, [Abrahamson] 218  
therapy, [Black & others] 302  
**HYPERLACTACIDEMIA**: See Lactic acid, in blood  
**HYPERLIPEMIA**, diabetic, lipemia retinalis in, [Manning & others] 136  
**HYPERPOTASSEMIA**, etiology and symptoms, [Stephens] 480  
veratrin sulfate and, [Collazo] 126  
**HYPERTENSION**: See Blood pressure, high  
**HYPERTHYROIDISM**, anoxic anoxia and, [Bollman & others] 395  
diabetes and, effect of *p*-hydroxypropionophenone on, [Brady & Hedges] 395  
diabetes and, effect of propylthiouracil on, [de Castro & Teixeira] 397  
diabetes and, effect of testosterone propionate on metabolism in, [Kinsell & others] 227  
pregnancy and, [Dailey & Benson] 305  
diabetes and, therapy, [Bowen & Lenzner] 125  
hypercholesteremia and, [McMahon & others] 137  
**HYPOLYCEMIA** [Wilder] \*183  
adrenal cortex response to insulin and, [Vogt] 149  
alloxan, intrasplenic adrenal transplants and, [Bernstein & Enoch] 124  
alloxan, liver in production of, [Kepinov] 311  
anoxic anoxia and, [Bollman & others] 395  
brittle diabetes and, [Schwab] 142  
coma, glucose in, [Oakley] 474  
coma, insulin and, [Kay & Thorley] 227  
coma, insulin shock therapy and, [Thorley & Kay] 148  
coma, irreversible, [Fazekas & others] 130  
cortisone and, [Schlier & others] 232  
diabetes and, free diet in prophylaxis of, [Uhry & others] 407  
diabetes and, tetraethylammonium in, [Collazo] 126  
diagnosis, [Landmann] 402  
experimental, centauria and, [Beltran Bigorra & others] 301  
experimental, etiology, [Kadota & Midorikawa] 311  
functional, diagnosis, (Groen & others] 401  
effect of insulin and relation to eosinophil response, [Volk & others] 483  
insulin-induced, [Kersley & others] 52  
islands of Langerhans, adenoma and, therapy, [Brown & others] 462  
islets of Langerhans tumors and, [Gaddy & others] 309; [McMillan & Scheibel] 137  
manifestations, [Occhino] 55  
provoked, [Ziviani] 408  
rheumatoid arthritis and, [Kersley & others] 52  
Simmond's disease and, [Robertson & Kirkpatrick] 317  
spontaneous, [Ziviani] 408  
spontaneous, diagnosis, [Hardwig & Schrock] 225  
spontaneous, in insulin hypoglycemia therapy, [Kersley & others] 53  
spontaneous, insulin test and, [Hardwig & Schrock] 225  
spontaneous, surgery and, [Greif & Moro] 50  
"stress," eosinopenia and, [Pfeiffer & others] 315  
**HYPOINSULINISM**, etiology, [Banerjee] 461  
**HYPOPHYSECTOMY**, effect on Islets of Langerhans [Bryans and others] \*358  
**HYPOTASSEMIA**, diabetic coma and, [Perry & Rosenbaum] 139; [Perry] 475  
etiology and symptoms, [Stephens] 480  
**HYPOTHYROIDISM**, anoxic anoxia and, [Bollman & others] 395  
hypercholesteremia and, [McMahon & others] 137  
hypercholesteremia and hypercholesteremia in, [Friedman & others] 400  
**HYPOXIA**, blood sugar and hemoglobin levels in, [Stickney & others] 480  

**I**

**IDITOL**, metabolism, [Blakley] 43  
**INDUSTRY**, diabetic in, [Blotner & Marble] 124  
**INFANTS**, of diabetics, care, [Grier & Newcomb] 131  
of diabetics, similarity between hemolytic disease of newborn and, [Gerard] 222  
serum lipoprotein value in, [Kempe & others] 227  
**INFECTIONS**, gas, in diabetes, [Spring & Kahn] 143  
**INOSITOL**, acidosis and, [Beatty & West] 42  
**INSULIN**, action, [Levine] 228; [Best] \*264  
action, duration, [Gerritzen] 309; [Gornall] 309  
action, effect of ammonium chloride acidosis on, [Mackler & others] 54  
action, effect of zinc on, [Hallas-Moller & others] 465  
action, on acid soluble phosphorus compounds in the blood, [Kvamme] 228  
action, mechanism, [Haugaard & Marsh] 466  
administration, loss during injection, [Horne] 225, 226; [Luntz] 135, 229  
administration, oral, [Mohnikel] 230  
administration, percutaneous, [Bresgen & Heinlein] 45  
administration, rectal, [Bresgen & Heinlein] 45; [Buttarni & Baronchelli] 396  
administration, timing of injections, [Annotations] 393  
administration, with hyaluronidase, [Bresgen & Heinlein] 45  
adulteration, [Wiele & others] 153  
allergy: See Insulin, resistance  
assay, [Young & Stewart] 485  
assay, by fibril formation and precipitation, [Foster & others] 308  
Banting Memorial Lecture on [Best] \*257  
blood sugar and, cell permeability and, [Levine] 229  
blood sugar control and, [Long] 403  
bound, in tissue, action, [Stadie & others] 407  
bovine, chemistry, [Udenfried & Velick] 149  
carbohydrate metabolism and, [Hackedorn] 131  
chemistry, [Sanger] 58; [Sanger & Tuppy] 141; [Best] \*264; [Farr] 308; [Gutfreund] 310; [Low] 470  
action of chymotrypsin on, [Phillips] 140; [Stephen] 144  
coma, effect on uropepsin excretion, [Jacobs & others] 468  
coma, islet-cell tumor of pancreas and [Webster & Blades] 322  
combination with rat diaphragm, effect of insulin-resistant serum on, [March & Haugaard] 404  
combined, effect on metabolism of lactating mammary glands, [Hills & Stadie] 467  
comparison of pig insulin and cattle insulin, [Lens & Evertzen] 312  
complications in use of, [Scoville] 318  
"core", analysis of, [Stephen] 144  
crystalline, digests of, action, [Phillips] 405  
crystalline, with NPH Insulin, [Stephens & others] 144  
dermal reactions to [Paley & Tunbridge] \*22  
diabetes and, [Arduini] 393; [Greenlee] 50; [Mohnikel] 230; [Pennock] 56; [Queries and Minor Notes] 405  
diabetes and, acidosis, [Tolstoi] 482  
diabetes and, coma, [Tolstoi] 482

- diabetes and, effect of testosterone propionate on, [Zimmerman & others] 235
- diabetes and, in infants, [Brodrick & others] 396
- diabetes and, in outpatient clinic, [Megevand] 404
- diabetes and, oxygen consumption in, [Horstmann] 226
- diabetes and, pregnancy, [Pedersen] 405
- diabetes and, severe, [Lobo Onell] 402
- diabetic acidosis and, [Nabarro & others] 473
- diabetic coma and, [Goldner] 50
- digest, activity of, [Phillips] 405
- dosage, determination, [Marshall] 404
- dosage, in diabetes complicated by hyperthyroidism, effect of propylthiouracil on, [de Castro & Teixeira] 397
- duck embryo development and, [Lan-dauer] 228
- effects of acidosis on action of [Guest and others] \*276
- effect on blood-aqueous barrier penetration by glucose, [Ross] 318
- effect on blood coarboxylase level in diabetes, [Siliprandi & Navazio] 479
- effect on cell membranes, [Levine] 229
- effect on cell permeability to sorbital, [Wick & Drury] 152
- effect of chymotrypsin action on, [Phillips] 56
- effect on coarboxylase formation from thiamine in diabetic rat, [Siliprandi & Siliprandi] 319
- effect on eosinopenia in normals and diabetics, [Pfeiffer & others] 315
- effect on eosinophil count and relation to hypoglycemia response, [Volk & others] 483
- effect on fructose metabolism in diabetics, [Miller & others] 404
- effect on glucose distribution volume, [Drury & Wick] 47
- effect on glucose metabolism in diabetics, [Miller & others] 404
- effect on glucose utilization of rat diaphragm, [Groen & others] 401
- effect on metabolism of adipose tissue, [Haugaard & Marsh] 466
- effect on phosphate uptake by erythrocytes from diabetics, [Gourley] 465
- effect on rat diaphragm under anaerobic conditions, [Walaas & Walaas] 407
- ergot alkaloids and, effect on blood sugar level in alloxan-diabetic rats, [Shepherd & Buchanan] 479
- fat synthesis by mammary gland and, [Balmann & Folley] 219
- fatty acid synthesis and, [Gurin] 224
- glucose and effect of volume of distribution of glucose, [Wick & others] 152
- glucose and, reactions, [Schwartz & Lea] 406
- glucose and, tolerance test, in diabetic diagnosis, [Volk & Lazarus] 149
- glucose and, tolerance test, lymphocyte count and, [Volk & Lazarus] 321
- glucose metabolism and, [Drury & others] 47; [Villev & others] 321
- glucose permeability in erythrocytes and, [Yang] 154
- glucose utilization and, [Ingle & others] 226
- glycogen in liver and, [Vallance-Owen] 321
- glycogen synthesis and, [Engel] 128; [Villev & others] 321
- growth hormone and, in nitrogen balance, [Milman & others] 54
- HGF in, determination, [Rowlinson] 318
- hyperinsulinism [Best] \*262
- hypoglycemia, cardiovascular manifestations of, effect of SKF 501 on, [Meilman & Altschule] 472
- hyperglycemia and, cataracts in diabetes and, [Anonymous] 460
- hypoglycemia, coma and, [Kay & Thorley] 227
- hypoglycemia, effect on fetal rats and mice, [Hicks] 467
- hypoglycemia, effect on food intake, [Mayer & Bates] 472
- hypoglycemia, eosinophilia and, [Lawrence] 469
- hypoglycemia, experimental, [Hicks] 467
- hypoglycemia, fatal, in panhypopituitarism, [Horstmann] 226
- hypoglycemia induced by [Wilder] \*183
- hypoglycemia, in therapy of gout, [Weitzner] 484
- hypoglycemia, prophylaxis with gamma globulin from insulin-resistant patient, [De Filippis & Iannoccone] 463
- hypoglycemic effect of, [Benjamin] 220; [Eroz & others] 308
- inactivation, [Marsh & Haugaard] 404
- in fatty metamorphosis of the liver associated with pancreatic calcification, [Sharp & others] 406
- inhibition of acetoacetate-induced changes, in blood lactic and blood ascorbic acids, [Nath & Chakrabarti] 314
- in plasma, diabetes and, [Bornstein & Lawrence] 302; [Editorial] 306, 307
- in serum, determination, [Groen & others] 401
- insuloma [Best] \*262
- in islands of Langerhans [Best] \*259
- islands of Langerhans growth and, [Evans & Haist] 129
- lactate metabolism and, in diabetic liver, [Feltz & others] 130
- light scattering studies on, [Tietze & Neurath] 482
- lymphatic leukemia and, [Gitman & others] 131
- lymphocyte response to, in diabetes, [Lazarus & others] 134
- mixtures, [Arduino] 393; [Feiler] 222; [Gerritzen] 309; [Iturbe Zabaleta & others] 311; [Megevand] 404; [Sugar & Alpert] 146; [Van Buchem & Nieveen] 482
- mixtures, in infants and children, [Montagna] 230; [Staffieri & Cardonnet] 319
- modifications, [Hallas-Moller & others] 466
- modifications, Di-Insulin, [Megevand] 404; [Van Buchem & Nieveen] 482
- modifications, Globin Insulin, [Duncan] 306; [Gerritzen] 309; [Van Buchem & Nieveen] 482
- modifications, Globin Zinc Insulin, [Foster & others] 308; [Sugar & Alpert] 146
- modifications, Globin Zinc Insulin, [British Insulin Manufacturers' Biological Sub-Committee and the Dept. of Biological Standards, National Institute for Medical Research] 462
- modifications, Insulin-Novo, [Stepantschitz & Kresbach] 144
- modifications, Insulin Retardol, [Van Buchem & Nieveen] 482
- modifications, Iso-Insulin Novo, [Gerritzen] 309
- modifications, NPH Insulin, [Arduino] 393; [Arduino & Vieira da Silva] 218; [Cardonnet & Staffieri] 304; [Duncan] 306; [Iturbe Zabaleta & others] 311; [Jauregui] 311; [Lobo Onell] 402; [Megevand] 404; [Murdock] 139; [Osio] 314; [Queries and Minor Notes] 405; [Richer] 58; [Sal-dun de Rodriguez] 318; [Shuman & Francis] 59; [Stephens & others] 144; [Sugar & Alpert] 146; [Sweeney] 147; [Peck & others] \*290
- modifications, NPH 50, [Chanis] 304; [Gerritzen] 309; [Groff & Skelton] 50
- modifications, Protamine Zinc Insulin, [Arduino] 393; [Arduino & Vieira da Silva] 218; [Brady & Hedges] 396; [Foster & others] 308; [Gerritzen] 309; [Iturbe Zabaleta & others] 311; [Jauregui] 311; [Lobo Onell] 402; [Megevand] 404; [Richer] 58; [Sal-dun de Rodriguez] 318; [Sugar & Alpert] 146; [Van Buchem & Nieveen] 482
- molecular weight, [Gutfreund] 310
- molecular weight, determination, [Tietze & Neurath] 482
- non-depot delayed acting, [Bischoff] 220
- in pancreas [Wrenshall & others] \*87
- in pancreas [editorial, Best] \*155; \*259
- peptides of, from enzyme hydrolysis, structure, [Sanger & Tuppy] 58
- phenylalanyl chains of, [Sanger & Tuppy] 141
- plasma potassium and, [Drury] 127; [Farber & others] 129
- polyvinylpyrrolidone complex and, [Farr] 308
- preparations, [Knowles & Kristal] 53
- preparations, assay, [Pruner] 316
- pyruvate metabolism and, [Villev & others] 321
- reactions, dermal, [Grieve & others] 310; [Paley] 315
- requirements, effect of *p*-hydroxy-propionophenone on, [Brady & Hedges] 396
- requirements, effect of stress on, [Annotations] 459
- requirements, in alloxan diabetes after pancreatectomy, [Rodriguez-Candel] 317
- requirements, in diabetes with renal disease, [Zubrod & others] 235

- requirements, in pancreatic diabetes, effect of radioiodine thyroidectomy on, [Neal & others] 231
- resistance, [Jarlov] 133; [Blandi] 302; [Grieve & others] 310; [Crampton & Davis] \*201
- resistance, allergy to [Paley & Tunbridge] \*22
- resistance, anti-insulin factor and, [Bornstein & Trehwella] 44
- resistance, diabetic coma in children and, [Root & others] 140
- resistance, etiology, [De Filippis & Iannoccone] 463; [Dolger] 463
- resistance, growth hormones and, [Lukens] 135
- resistance, in diabetic ketosis, [Stowers] 145
- resistance, therapy, [Blandi] 302; [Dolger] 463
- response, prediction, [Feinblatt & Ferguson] 48
- secretion, brittle diabetes and, [Schwab] 142
- secretion, in scorbutic guinea pigs, [Banerjee & others] 300
- sensitivity, diabetes and, [Herold] 310
- sensitivity, glucose-insulin tolerance test and, [Lazarus & Volk] 469
- in serum, bioassay using rat diaphragm, [Perlmutter & others] 475
- serum phosphate response to, [Schneeberg] 232
- shock, electrocardiographic abnormalities in, potassium chloride and, [Kraft & others] 133
- shock, therapeutic use of, blood sugar level during, [Perkoff & Tyler] 56
- shock, therapeutic use of, hyperglycemic coma and, [Thorley & Kay] 148
- shock, therapeutic use of, tolerance tests and, [Perkoff & Tyler] 56
- source of [Best] \*258
- splanchnic blood flow and, [Bearn & others] 220
- substitutes, *Cacalla Composita*, [Medical Forum (Chicago)] 54
- synergism with various substances, glycemia and, [Stutinsky] 481
- test, vagal continuity and, [Hollander] 401
- thiamine phosphorylation and, [Sili-prandi & Navazio] 479
- tolerance, tests, in insulin shock therapy for psychoses, [Perkoff & Tyler] 56
- tolerance, tests, lymphocyte count and, [Volk & Lazarus] 321
- tuberculosis in diabetes and, [Montenaro & Ettore] 55; [Vieth] 483
- types, [Palmer] 55
- unmodified, diabetes and, [Arduino] 393
- unmodified, diabetes and, in outpatient clinic, [Megevand] 404
- unmodified, in diabetic surgery, [Cochrane & Gross] 125
- utilization of carbohydrate [Long] \*6
- zinc and, severe diabetes and, [Hallas-Moller & others] 466
- INSULIN-NOVO**, arthritis and, effect on blood sugar behavior, [Stepantschitz & Kresbach] 144
- INSURANCE**, diabetes and, [Blotner & Marble] 124, for diabetics [Montgomery] \*117
- INTERCAPILLARY GLOMERULOALINOSIS**, diabetes and, [Azerad & others] 219, 394
- INTERCAPILLARY GLOMERULONEPHROSIS**, diabetes and, [Editorial] 128
- INTERCAPILLARY GLOMERULOSCLEROSIS**, atheroma of renal arteries in, [Hall] 401
- diabetes and, [Azerad & others] 219, 394; [Editorial] 307; [Recht] 316; [Root] 317; [Yener] 154; [Zubrod & others] 235
- diabetic nephropathy, [Clarke] 305; [Wilson & others] 153
- INTERNATIONAL DIABETES FEDERATION**, first congress of \*166, \*339, \*254
- report on first congress of \*418; [Editorial, London] 463
- INTESTINES**, effect of pancreatectomy on, [Weigen & others] 484
- glucose absorption from, glycemic level and, [Lourau & Lartigue] 229
- glucose absorption, in pure strain mice, [Fenton & others] 464
- motility, anoxia and, [Liere & others] 134
- phospholipid synthesis in, experimental diabetes and, [Zilversmit & DiLuzio] 322
- IODINE**, radioactive, thyroidectomy, pancreatic diabetes and, [Neal & others] 231
- IRON**, in urine, dithizone diabetes and, [Wolff & others] 235
- ISLANDS OF LANGERHANS**: See Pancreas, islands of Langerhans
- ISO-INSULIN NOVO**, action, duration, [Gerritzen] 309
- 5-ISOPROPYLIDENE-2, 4-dithiohydantoine**, development of experimental diabetes and, [Martinez] 471
- 4-dithiohydantoine, thyroidectomy and, effect on sulphydryl content in tissues, [Martinez] 471
- J**
- JAUNDICE**, recurrent, in chronic relapsing pancreatitis, [Selesnick] 479
- K**
- KERATITIS**, neuroparalytic, Priscoline in, [Stern] 407
- KETOACIDOSIS**, alloxan diabetes and, tissue electrolytes in, [Knowles & Guest] 468
- α*-KETO ACIDS**, formation, *α*-amino acids and, [Johnson & others] 133
- γ*-KETOGLUTARIC ACID**, acidosis and, [Beatty & West] 42
- KETONE BODIES**, in blood, effect of condensation product of glucose and ethylacetoacetate on, [Nath & Sahul] 474
- in blood, stress and, [Hinkle & Wolf] 310
- in urine, coma and, [Fuller] 49
- in urine, acidosis and, [Beatty & West] 42
- in urine, hyperthyroidism and, [Dailey & Benson] 305
- in urine, surgery and, [Elman & Weichselbaum] 308
- production, experimental, effect of sorbitol and iditol on, [Blakley] 43
- KETONEMIA**: See Ketone bodies, in blood
- KETONES**, concentration, effect of stress in diabetes on, [Annotations] 459
- metabolism, in diabetes and thyrotoxicosis, testosterone propionate and, [Kinsell & others] 227
- role in diabetic coma [Fisher] \*108
- KETONURIA**: See Ketone bodies, in urine
- KETOSIS**: See Acidosis; Diabetes, acidosis; Diabetes, coma
- KIDNEYS**, alloxan diabetes and, [Arteta] 460
- blood sugar and, [Cohn & others] 46
- blood vessels, atheroma of, in Kimmelstiel-Wilson's syndrome, [Hall] 401
- diseases, diabetes and, [Clarke] 305; [Editorial] 47, 128; [Kerr & others] 402; [Root] 317; [Zubrod & others] 235
- diseases, diabetes and, choline in, [Engelson] 399
- diseases, diabetes and, differential diagnosis, [Root & others] 140
- diseases, diabetes and mortality, [Heintzelmann] 467
- diseases, plasma potassium level and, [Farber & others] 129
- effect of alloxan on, [Test & others] 148
- glomerular lesions, alloxan and, [Test & others] 148
- gluconeogenesis, hyperglycemia and, [Cohn & others] 46
- glucose excretion by, mechanism, [Govaerts] 465
- glucose synthesis and, in eviscerated dogs, [Mackler & others] 313
- gluconeogenesis, evisceration and, [Saugman] 232
- inhibitory effect, alloxan diabetes and, [De Oya & others] 46
- lesions, alloxan diabetes and, [Mann & others] 230
- phospholipid synthesis in, experimental diabetes and, [Zilversmit & DiLuzio] 322
- sucaryl sodium in, [Taylor & others] 320
- KIMMELSTIEL - WILSON SYNDROME**: See Intercapillary glomerulosclerosis
- KOMB INSULIN**, diabetes and, [Feiler] 222
- KWASHIORKOR**, pancreatic enzyme concentration of duodenal contents in, [Thompson & Trowell] 481
- L**
- L 08146**, effect as potential vasodilator, [Sayen & others] 406
- LABORATORY TESTS**, diagnosis and management of diabetes [Lukens] \*12
- evaluation of self-testing methods for



- diabetes in [Getting & others] \*194  
glucose tolerance [Lukens] \*13
- LACTATE**, accumulation, rat diaphragm muscle and, [Villev & others] 321  
in blood [Hills & others] \*351  
in blood, sodium acetoacetate-induced changes in, effect of insulin and amellin on, [Nath & Chakrabarti] 314  
in fatty acid synthesis in diabetic liver, effect of fructose on, [Baker & others] 461  
metabolism, in diabetic liver, insulin and, [Felts & others] 130
- LACTIC ACID**, curves, effect of galactose and glucose administration on, [Alslev] 459  
formation, by cerebral cortex, electrical stimulation and, [McIlwain & others] 230  
formation, effect of insulin on, in rat diaphragm, [Walaas & Walaas] 407  
in blood, effect of tetraethyl-ammonium on, [Collazo] 126  
in blood, glucose tolerance test and, in diagnosis of diabetes and Cushing's syndrome, [Wilder] 322  
in blood, veratrin sulfate and, [Collazo] 126  
output in diabetic ketosis, [Craig & others] 462
- LACTOFLAVIN**: See Riboflavin
- LACTOSE**, determination, methods, [Fairbridge & others] 129  
synthesis, in mammary gland, effect of insulin on, [Hills & Stadie] 467
- LANGERHANS**, Paul, biographical note [Barach] \*411
- LECITHIN**, effect on formation of hypercholesteremia after biliary obstruction, [Friedman & Byers] 400
- LESIONS**, dental, diabetes and, [Rouques] 58
- LEUKEMIA**, lymphatic, insulin and, [Gitman & others] 131
- LEUKOCYTOSIS**, acute pancreatitis diagnosis and, [Tseng & others] 148
- LEVULOSE**, effect on carbohydrate metabolism, in diabetes, obesity and liver parenchyma damage, [Stuhlfauth & Prosiegel] 320
- LIPASE**, in blood, pancreatitis and, [Lopes de Almeida & Grossman] 403; [Machado] 404  
in duodenal contents of kwashiorkor patients, [Thompson & Trowell] 481  
in pancreas, effect of x-ray radiation on, [Rauch & Stenstrom] 406  
in serum, cancer of the pancreas and, [Brown & others] 396  
in serum, experimental hemorrhagic pancreatitis and, [Persky & others] 56
- LIPEMIA RETINALIS**, diabetes and, serum lipids in, [Manning & others] 136
- LIPIDS**, absorption, mechanism, [Ermala & others] 129  
deposition, arteriosclerosis and [Wilens] 153  
in blood, arteriosclerosis and, [Barr & others] 123  
in blood, arteriosclerosis and, effect of heparin, [Graham & others] 131  
in blood, effect of low-fat diet in multiple sclerosis on, [Wilmot & Swank] 235  
in glomerulosclerosis [Engelberg & others] \*425  
in serum, in diabetic lipemia retinalis, [Manning & others] 136  
in serum, thyroidectomy by radioiodine and, [Neal & others] 231  
metabolism, in arteriosclerosis, [Kellner] 402
- LIPOGENESIS**: See Fatty acids, synthesis
- LIPOMICRONEMIA**, etiology, [Ermala & others] 129
- LIPOPROTEINS**, arteriosclerosis and, [Barr & others] 123  
cholesterol and atherosclerosis in diabetes [Barach & Lowy] \*441  
in diabetic glomerulosclerosis [Engelberg & others] \*425  
metabolism, heparin and, [Graham & others] 131  
in serum, arteriosclerosis and, [Jones & others] 227  
serum and cholesterol in normal and young patients with diabetes [Keiding & others] \*434  
in serum, juvenile diabetes and, [Carr & others] 304  
in serum, of infants and children, [Kempe & others] 227  
metabolism, role of heparin in [Anfinson & others] 393
- LIPOTROPIC SUBSTANCES**, in pancreas, [Haanes & Gyorgy] 51; [Rhoads & others] 58
- LITHIASIS**, pancreatic, fatty metamorphosis of liver and, [Sharp & others] 406
- LIVER**, adrenal cortex and, in carbohydrate metabolism, [Bernstein & Enoch] 124  
alloxan hypoglycemia and, [Kepinov] 311  
biopsy, in detection of fatty metamorphosis of liver in pancreatic calcification, [Sharp & others] 406  
cholesterol, synthesis, [Byers & Friedman] 397  
cirrhosis, complication of chronic relapsing pancreatitis with recurrent jaundice, [Selesnick] 479  
cirrhosis, fructose in blood in, [Wahlenfels] 322  
diseases, glucose tolerance tests in, [Bastenie & Kowalewski] 394; [Soskin] 143  
dysfunction, diabetes and, [Lazarus & others] 312  
fatty, experimental, prevention, [Bosshardt & others] 44  
fatty, ligation of pancreatic ducts and, [Clowes & Macpherson] 46  
fatty, pancreatic calcification and, [Sharp & others] 406  
fatty, prophylaxis with papain and ficin, in insulin-treated, depancreatized dogs, [Feinberg & others] 464  
fructose metabolism in, diabetes and, [Craig & others] 462  
glucose, output, insulin and, [Bearn & others] 220  
glucose, production in diabetes, [Bearn & others] 124  
glycogen, body temperature and, [Eroz & others] 308  
glycogen, diabetic coma and, [Vallance-Owen] 321  
glycogen, diabetic ketosis and, [Vallance-Owen] 321  
glycogen, effect of a glycogenolytic factor on, [Sokal] 480  
glycogen, effect of ischemic shock on phosphorylation of, [Cordier & others] 397  
glycogen, hyperthyroidism and, [Dailey & Benson] 305  
glycogen, insulin and, [Vallance-Owen] 321  
glycogen, in the chicken, [Szepsenwol & Michalski] 147  
glycogen, potassium deficiency and, [Fuhrman] 130  
glycogen, effect of salicylate on, in alloxan-diabetic rat, [Smith & others] 480  
glycogenolysis, alloxan and, [Kepinov] 311  
iditol oxidation in, [Blakley] 43  
insulin sensitivity and, in diabetes, [Bearn & others] 124  
nitrogen content in, alloxan diabetic rat and, [Wollman & Scow] 154  
nucleoproteins, effect of alloxan on, [Diermeier & others] 126  
phospholipid synthesis and, [Ranney & others] 57  
phospholipid synthesis in, experimental diabetes and, [Zilversmit & DiLuzio] 322  
sorbitol oxidation in, [Blakley] 43  
sucaryl sodium in, [Taylor & others] 320  
tissue, hexokinase activity of, [Long] 229  
uric acid metabolism in, alloxan formation and, [Grunert & Phillips] 131
- LIVER EXTRACTS**, diabetic neuropathy and, [Rabinowitch] 316  
from pregnant mammalian liver, diabetic neuropathy and, [Collens & others] 305
- LUPUS ERYTHEMATOSUS**, cortisone in, [Newman & Feldman] 55
- LYMPHOCYTES**, count, after glucose administration in diabetics, [Lazarus & others] 312  
glucose and, [Gitman & others] 131  
insulin and, [Gitman & others] 131  
level, insulin tolerance and insulin glucose tolerance tests and, [Volk & Lazarus] 321  
response to glucose and insulin in diabetes, [Lazarus & others] 134

# M

- MAGNESIUM**, in serum, in diabetic coma, [Martin & others] 471  
in serum, potassium in serum and, [Martin & others] 471  
metabolism, [Martin & others] 471  
metabolism, in diabetic acidosis, [Nabarro & others] 474
- MALIC ACID**, acidosis and, [Beatty & West] 42
- MALONIC ACID**, acidosis and, [Beatty & West] 42



inhibitory action of, [Shideman & Rene] 59  
**MAMMARY GLAND**, lactating, metabolism, effect of combined insulin on, [Hills & Stadie] 467  
**MANGANOUS CHLORIDE**, pyruvate metabolism in *Lactobacillus arabinosus* and, [Nossal] 314  
**MARRIAGE**, diabetes and, [Thone] 148  
**4-MERCAPTO-2-METHYLQUINAZOLINE**, development of experimental diabetes and, [Martinez] 471  
 thyroidectomy and, effect on sulfhydryl content in tissues, [Martinez] 471  
**MESO-OXALIC ACID**, salts of, effect on alloxan diabetes, [Kobayashi & others] 468  
**METABOLISM**, biological antagonism [editorial, Murphy] \*236  
 effect of anti-tubercular compounds on, [Vieth] 483  
 effect of drugs on, in rheumatoid arthritis, [Luft & Sjogren] 313  
 effect of insulin on, [Stadie & others] 407  
 enzyme activity and, in alloxan diabetes, [Copenhaver & others] 305  
 evaluation in diabetes, [Otto] 314  
 foodstuffs, interrelationship, [Peters] 139  
 growth and, [Maassen] 313  
 rate, in diabetic acidosis, [Fisher & Kleiner] 399  
**METHIONINE**, administration, rectal, in diabetes, [Buttari & Baronchelli] 396  
**1-METHYL-BISDEHYDRO-DOISYNOLIC ACID**, diabetes and, [Rodriguez] 476  
**METHYLENE BLUE**, effect on 8-hydroxyquinoline diabetogenic action, [Root & Chen] 478  
**MICROMELIA**, in duck embryos, insulin and, [Landauer] 228  
**MINERAL METABOLISM**, effects of acidosis on [Guest & others] \*276  
**MINKOWSKI**, Oscar, biographical note [Houssay] \*112  
**MONILIASIS**, diabetes and, [Guy] 224  
 diabetes and, carbowax-sulfur ointment in, [Hopkins & others] 468  
**MORPHINE**, effect on ether hyperglycemia, [Watts] 235  
**MOUSE INSULIN ASSAYS**, errors in, [Young & Stewart] 485  
**MUMPS**, diabetes and, [Editorial] 48  
**MUSCLE**, extracts, hexokinase activator in, [Weil-Malherbe & Bone] 151  
 extracts, in alloxan diabetes, glycolytic activity of, [Uzan & Dziri] 149  
 phospholipid synthesis in, experimental diabetes and, [Zilversmit & DiLuzio] 322  
**MYASTHENIA GRAVIS**, diabetes and, as complications of pulmonary tuberculosis, [Schantz] 478  
**MYOCARDIAL INFARCTION**, hypercholesterolemia and hypercholelataemia in, [Friedman & others] 400  
**MYEDEMA**, differential diagnosis, Simmond's disease and, [Robertson & Kirkpatrick] 317  
 pituitary, insulin and, [Horstmann] 226

N

**NAUNYN**, Bernhard, biographical note [Woodyatt] \*240  
**NECROBIOSIS LIPOIDICA**, diabetes and, cortisone in, [Newman & Feldman] 55  
**NECROBIOSIS LIPOIDICA DIABETICORUM**, diabetes and, [Guy] 224  
**NEOMYCIN**, eviscerate rat survival and, [Ingle & Nezamis] 52  
**NEPHRITIS**, diabetes and, [Ramirez Panel] 316  
**NEPHROSIS**, diabetes and, cortisone in, [Holmes & others] 225  
 diabetes and, in children, pathology, [Root & others] 140  
 hypercholesterolemia and hypercholelataemia in, [Friedman & others] 400  
**NEURITIS**, optic, [Carroll] 304  
 optic, Priscoline in, [Stern] 407  
**NEUROPATHY**, diabetic, [Kerr & others] 402; [Root] 317  
 diabetic, arteriosclerosis and, [Epstein] 129  
 diabetic, Charcot joints in, [Lister & Maudsley] 229; [Zucker & Marder] 322  
 diabetic, classification, [Epstein] 308  
 diabetic, diagnosis, [Duncan & Beidlemann] 127  
 diabetic, liver extract in, [Collens & others] 305  
 diabetic, prognosis, [Epstein] 129, 308  
 diabetic, therapy, [Bunting] 45; [Rabinowitch] 316; [Sancetta & others] 141  
 diabetic, vascular disease and, [Epstein] 308; [Epstein] 464  
**NEW YORK DIABETES ASSOCIATION**, fellowship in research for diabetes \*422  
**NITROGEN**, balance, growth hormone and insulin in regulation of, [Milman & others] 54  
 balance, riboflavin excretion and, [Pollack & Bookman] 315  
 nonprotein, effect of Priodax on, [Lominack] 53  
 loss, diabetic acidosis and, [Nabarro & others] 474  
 metabolism, in diabetic acidosis, [Nabarro & others] 474  
 in tissue, in alloxan-diabetic rats with ketoacidosis, [Knowles & Guest] 468  
**NITROGEN MUSTARD**, plasma sulfhydryl and, [Shacter & others] 478  
**NITROPRUSSIDE**, in determination of blood glutathione, [Thompson & Watson] 320  
**NOR-EPINEPHRINE**: See Arterenol  
**NOTATIN**: See Glucose oxidase  
**NPH 50**, action, duration, [Gerritzen] 309  
 comparison with other insulins, in severe diabetes, [Sugar & Alpert] 146  
 diabetes and, [Croff & Skelton] 50  
 results, [Chanis] 304  
**NPH INSULIN**, [Editorial] 48  
 brittle diabetes and, [Arduino & Vieira da Silva] 218  
 comparison with other types, [Iturbe Zabaleta & others] 311; [Jauregui] 311; [Richer] 58

diabetes and, [Arduino & Vieira da Silva] 218; [Duncan] 306; [Linder & others] 135; [Lobo Onell] 402; [Murdock] 139; [Oslo] 314; [Panigagua & Dominguez] 139; [Queries and Minor Notes] 405  
 diabetes and, in Mexico, [Palacios Bermudez & others] 139  
 diabetes and, in outpatient clinic, [Megevand] 404  
 diabetic complications and, [Shuman & Francis] 59  
 experiences with, [Cardonnet & Staffieri] 304; [Sweeney] 147  
 juvenile diabetes and, [Montagna] 138, 230; [Saldun de Rodriguez] 318  
 Protamine Zinc Insulin compared with, in diabetes, [Arduino & Vieira da Silva] 218  
 with crystalline insulin, [Stephens & others] 144  
**NUCLEOPROTEINS**, hepatic, alloxan and, [Diermeier & others] 126

O

**OBESITY**, arteriosclerosis and, [Bruger & Oppenheim] 125  
 diabetes and, [Robson] 140  
 diabetes and, therapy, [Duncan] 306  
 hereditary, diabetes and oxygen consumption in, [Mayer & others] 472  
 hereditary, endocrine glands and, [Kasten] 401  
 laboratory investigations of [editorial] \*61  
**OCCLUSION**, retinal veins and, diabetic retinopathy and, [Becker & Post] 43  
**OPHTHALMOLOGY**, diabetes and, [Igersheimer] 226  
 Priscoline in, [Stern] 407  
**ORGANIC COMPOUNDS**, diabetogenic action of, [Kadota & Midorikawa] 311  
**OSTEOMYELITIS**, diabetes and, penicillin ointment in, [Jablonsky] 226  
**OSTEOPOROSIS**, diabetes and, [Berney] 220; [Hernberg] 467  
**OVARIES**, disorder, sterility and, [Kasten] 402  
**OVARECTOMY**, diabetes and, [Rodriguez] 476  
**OXALACETIC ACID**, acidosis and, [Beatty & West] 42  
**OXIDATION**, Krebs cycle, tubular secretory processes and, [Shideman & Rene] 59  
 succinate, tubular secretory processes and, [Shideman & Rene] 59  
**OXOMALONATE**, in urine, [Lukens] 135  
**OXYGEN**, consumption, in diabetes, [Horstmann] 226  
 consumption, in diabetic acidosis, [Fisher & Kleiner] 399  
 consumption, of hereditarily obese and diabetic mice [Mayer & others] 472  
 consumption, potassium deficiency and, [Fuhrman] 130  
**p-OXYPROPIOPHENONE**, hypophyseal diabetes and, [Tobiasch] 482  
**OXYPROTEINIC ACIDS**, diabetes and, carbon values in, [Schulitz] 232

11,17-OXYSTERIODS, production, in diabetic ketosis, [Rose] 478

# P

PAGET'S DISEASE, diabetes and, [Serre & Mirouze] 479  
gout and, [Serre & Mirouze] 479

PALMITIC ACID, C<sup>14</sup> labeled, glucose synthesis from, [Strisower & others] 146

effect on incidence of alloxan diabetes, [Rodriguez & Krehl] 477

PANCREAS, acinous tissue, ethionine and, [Goldberg & Chaikoff] 49  
annular, [Wakeley] 150

calcification: See Lithiasis, pancreatic  
cancer, contributions of clinical interest in 1950, [Elman & Lieberman] 399

cancer, diagnosis, [Brown & others] 396

cancer, in infants and children, [Warthen & others] 484

cancer, surgery, [Loggan & Kleinsasser] 403

cysts, contributions of clinical interest in 1950, [Elman & Lieberman] 399

dehydroascorbic acid content of, in scurvy, [Banerjee & others] 300

derivative, lipotropic activity, [Bosshardt & others] 44

diseases, contributions of clinical interest in 1950, [Elman & Lieberman] 399

extractable insulin in [Wrenshall & others] \*87

glutathione content of, in scurvy, [Banerjee & others] 300

growth, insulin and, [Evans & Haist] 129

hormones, diabetes and, [Barach] 300

hyperglycemic-glycogenolytic factor of, [Rodriguez-Candela] 317

insulin content [Best] \*263; [editorial, Best] \*155; [Best] 259

islands of Langerhans, adenoma, diagnosis, [Groen & others] 401

islands of Langerhans, adenoma, hyperinsulinism and, [Black & others] 302; [Blackwell] 395; [Whipple] 408

islands of Langerhans, adenoma, hypoglycemia and, [Gaddy & others] 309

islands of Langerhans, adenoma, surgery in, [Blackwell] 395

islands of Langerhans, adenoma, hypoglycemia and, therapy, [Brown & others] 462

islands of Langerhans, cells, staining, [Bencosme] 394

islands of Langerhans, effect of hypophysectomy on, [Bryans & others] \*358

islands of Langerhans, extractable insulin in tissue of, [Wrenshall & others] \*91

islands of Langerhans, growth hormones and, [Bornstein & others] 124

islands of Langerhans, growth of, insulin and, [Evans & Haist] 129

islands of Langerhans, hyalinization of, [Bell] \*341

islands of Langerhans, insulin in [Best] \*259

islands of Langerhans, lesions in, effect of sodium diethyldithiocarbamate and potassium ethylxanthate on, [Kadota & Midorikawa] 311

islands of Langerhans, microphotographs of \*260

islands of Langerhans, tumors, [Singleton & others] 233; [Webster & Blades] 322; [Whipple] 408

islands of Langerhans, tumors, hypoglycemia and, [McMillan & Scheibel] 137

islands of Langerhans, tumors, surgery, [Loggan & Kleinsasser] 403; [Smith & Cochran] 407

islands of Langerhans, tumors, therapy, [Smith & Cochran] 407; [Zajac] 154

islands of Langerhans, zinc content of, in experimental diabetes, [Stampf & others] 233; [Wolff & others] 235

lesions, etiology, [Veghelyi & others] 483

lipotropic substances in, [Haanes & Gyorgy] 51; [Rhoads & others] 58

microphotographs of \*260

secretion, blood sugar control and, [Long] 403

secretion, effect of vagisection and vagal stimulation on, [Dreiling & others] 398

secretion, effect of x-ray radiation on, [Rauch & Stenstrom] 406

secretion, function, [Clowes & Macpherson] 46

secretion, peptic ulcer formation and, [Poth & Fromm] 315

surgery, [Loggan & Kleinsasser] 403

tumor, diabetes and, [Dreiling] 398

tumor, diagnosis, [Dreiling] 398

water and electrolyte excretion of, [Hildes & others] 401

"PANCREASMELLIN-NEU," comparison with insulin, [Mohnike] 230

PANCREATECTOMY, alloxan diabetes and, [Mirsky & others] 137

diabetes from, blood glucose in, salicylates and, [Bornstein & others] 302

diabetes from, sulphydryl content of tissues in, [Martinez] 471

effect on insulin requirements in alloxan diabetes, [Rodriguez-Candela] 317

effect on stomach and small intestine, [Weigen & others] 484

subtotal, diabetic incidence in rat after, [Houssay] 51

PANCREATIC DUCT, ligation, fatty livers and, [Clowes & Macpherson] 46

PANCREATICOCASTROSTOMY, [Wells & others] 408

surgery in pancreatic cancer and, [Dill-Russell] 398

PANCREATITIS, acute, contributions of clinical interest in 1950, [Elman & Lieberman] 399

acute, diabetes and, [Tseng & others] 148

acute, etiology, [Gage & Gillespie] 49

acute, mechanism of production, [Gage & Gillespie] 49

acute, symptoms, [Gage & Gillespie] 49; [Machado] 404

acute, therapy, [Gage & Gillespie] 49

acute relapsing, [Rose] 140

chronic, [Rose] 140

chronic, alcohol in etiology of, [Dreiling & others] 398

chronic, complicated by pseudocyst, [Rose] 317

chronic, contributions of clinical interest in 1950, [Elman & Lieberman] 399

chronic, hereditary, [Comfort] 397

chronic, recurrent, diagnosis, [Malinowski] 136

chronic, relapsing, complications, [Selesnick] 479

chronic, relapsing, recurrent jaundice in, [Selesnick] 479

diabetes and, [Rose] 140

experimental, production, [Lopes de Almeida & Grossman] 403

gallbladder disease and, [Rose] 140

hemorrhagic, diagnosis, [Bowen] 44

hemorrhagic, experimental, serum lipase activity and, [Persky & others] 56

hepatitis and, [Rose] 140

pathology, [Machado] 404

surgery, [Loggan & Kleinsasser] 403

ulcerative colitis and, contributions of clinical interest in 1950, [Elman & Lieberman] 399

PANHYPOPITUITARISM, insulin hypoglycemia and, [Horstmann] 226

PANTOTHENIC ACID, insulin and, synergistic action on glycemia, [Stutinsky] 481

PAPAIN, fatty liver prophylaxis in insulin-treated, depancreatized dogs, [Feinberg & others] 464

PAPER CHROMATOGRAPHY, in identification of reducing sugars in urine, [Sophian & Connolly] 233

in determination of sugars in pregnancy urine, [Zilliacus & Roos] 408

PARADYSENTERY TOXIN, pancreatic lesions and, [Veghelyi & others] 483

PARALYSIS, cranial nerve, diabetes and, [Eareckson & Miller] 463

ocular muscles, diabetes and, [Eareckson & Miller] 463

PARAVERTEBRAL LUMBAR SYMPATHETIC GANGLION BLOCK, with sciatic nerve block, [Marmer] 471

PENICILLIN, eviscerate rat survival and, [Ingle & Nezamis] 52

ointment, in infections of feet and toes of diabetics, [Jablonsky] 226

PENTOBARBITAL, effect on ether hypoglycemia, [Watts] 235

PENTOSE, fermentation by bacteria from sheep rumen, [Heald] 310

in plasma, pre-eclampsia and, [Green & others] 50; [Sophian] 143

PEPSIN, effect on action of insulin, [Phillips] 405

PEPTIC ULCER, formation, carbohydrate metabolism and, [Poth & Fromm] 315

formation, pancreatic secretion and, [Poth & Fromm] 315

PEPTIDES, from insulin, [Sanger & Tuppy] 141

PFLUGER'S METHOD, determination of glycogen in tissue and, [Van der Kleij] 235

- PHENOLSULFONPHTHALEIN**, inhibition, [Shideman & Rene] 59
- PHENYLALANINE CHAIN OF INSULIN**, amino acid sequence in, [Sanger & Tuppy] 141
- PHOSPHATASE**, intestinal, effect of glucose on, in pure strain mice, [Fenton & others] 464
- PHOSPHATE**, acceptor, glucose as, in control of pyruvate oxidation in heart preparation, [Rabinovitz & others] 140
- excretion, glucose and, [Lips] 135
- excretion, in various conditions, [Leviton & Stead] 134
- in serum, insulin and, [Schneeberg] 232
- in serum, insulin shock therapy and, [Thorley & Kay] 148
- level of, effect of drugs on, [Pincus & others] 315
- reabsorption, in various conditions, [Leviton & Stead] 134
- uptake by erythrocytes from diabetics, effect of insulin on, [Gourley] 465
- PHOSPHOCREATINE**, effect of insulin on, in rat diaphragm, [Walaas & Walaas] 407
- PHOSPHOGLUCOMUTASE**, effect on glycogen synthesis from glucose in adipose tissue, [Creasey & Gray] 397
- 6-PHOSPHOGLUCONATE**, oxidation, by enzymes, [Dickens & Glock] 398
- PHOSPHOHEXOKINASE**, in rabbit muscle extracts, [Weil-Malherbe & Bone] 151
- Michaelis constant of, [Weil-Malherbe & Bone] 150
- PHOSPHOLIPIDS**, in blood, effect of low-fat diet in multiple sclerosis on, [Wilmot & Swank] 235
- in blood, hyperinsulinism and, [McGhee & others] 54
- in brain, hyperinsulinism and, [McGhee & others] 54
- in plasma, formation of, [Ranney & others] 57
- synthesis, in diabetic dogs, [Zilversmit & DiLuzio] 322
- PHOSPHORUS**, diabetic coma and, [Young] 154
- inorganic, acidosis and, [Mackler & others] 229
- inorganic, in serum, glucose and, in diabetes, [Volk & Lazarus] 149
- inorganic, in serum, in diagnosis of diabetes, [Schneeberg] 232
- metabolism, in diabetic acidosis [Nabarro & others] 474
- in serum, after glucose administration to diabetics, [Lazarus & others] 312
- PHOSPHORUS COMPOUNDS**, acid soluble, in blood, insulin and, [Kvamme] 228
- PHOSPHORYLASE**, effect on glycogen synthesis from glucose in adipose tissue, [Creasey & Gray] 397
- preparation from potato, [Gilbert & Patrick] 400
- PHOSPHORYLATION**, of fructose, effect of brain extracts on, [Weil-Malherbe & Bone] 151
- of glucose, reactions in rat brain extract during, [Weil-Malherbe & Bone] 150
- of thiamine, insulin and, [Siliprandi & Navazio] 479
- PHYSOSTIGMINE**, glucose permeability in erythrocytes and, [Yang] 154
- PITUITARY EXTRACTS**, of anterior lobe, diabetogenic, differentiation from growth hormone, [Raben & Westermeyer] 475
- of anterior lobe, fetal mortality and, [Barns & others] 42
- PITUITARY GLAND**, diabetes and, [Young] 154
- dysfunction, diabetes and, [Lazarus & others] 312
- experimental diabetes and, [Editorial] 128
- growth hormones of: See Growth hormone
- hemorrhage, Simmond's disease and, [Robertson & Kirkpatrick] 317
- hormones, bound insulin and, [Stadie & others] 407
- metabolic hormones [Long] \*8
- necrosis in a diabetic [Williams] \*37; [correspondence, D. Hurwitz] \*331
- production of hormones by *p*-hydroxypropicphenone and, [Brady & Hedges] 395
- PLACENTA**, conversion of glucose to fructose by, [Wajzer & Zelnik] 149
- PLASMA**, anti-insulin factor in, insulin resistance and, [Bornstein & Trehwella] 44
- hypoglycemic activity of, [Editorial] 306
- insulin level, assay, [Bornstein & Trehwella] 44
- PNEUMATURIA**, diabetes and, [Czebrinski & Karl] 46; [Spring & Hymes] \*378
- POLYNEURITIS**, vitamin B<sub>12</sub> in, [Menof] 404
- POLYPEPTIDE CHAINS**, in crystals of acid insulin sulfate, [Low] 470
- POLYSACCHARIDES**, metabolism, diabetic vascular lesions and, [Root] 317
- in plasma, effect of x-radiation and surgical trauma on, [Shacter & others] 478
- POLYVINYLPYRROLIDONE COMPLEX**, with insulin, effects, [Farr] 308
- POSTGRADUATE COURSE**, in diabetes and basic metabolic problems, program \*494
- POTASSIUM**, deficiency, experimental, [Black & Milne] 395
- deficiency, glucose tolerance and, [Fuhrman] 130
- deficiency, glycolysis and, [Seifter] 143
- deficiency, heart glycogen and, [Seifter] 143
- deficiency, liver glycogen and, [Fuhrman] 130
- deficiency, tissue metabolism and, [Fuhrman] 130
- diabetic acidosis and, [Perry] 475
- diabetic coma and, [Young] 154; [Perry] 475
- effects, electrocardiographic abnormalities during insulin shock, [Kraft & others] 133
- exchange, in rat erythrocyte, [Weller & Taylor] 485
- in liver, effect of glucose on, in adrenalectomized rat, [Dury] 463
- in plasma, acidosis and, [Abrams & others] 218; [Mackler & others] 229
- in plasma, adrenaline and, [Dury] 127
- in plasma, alkalosis and, [Abrams & others] 218
- in plasma, effect of glucose on, in adrenalectomized rat, [Dury] 463
- in plasma, electrocardiographic abnormalities and, [Abrams & others] 218
- in plasma, insulin and, [Dury] 127; [Farber & others] 129
- in plasma, in various conditions, [Farber & others] 129
- in serum, deficiency, diagnostic criterion, [Bellet & Finkelstein] 43
- in serum, changes, diabetic coma and, [Stephens] 480
- in serum, diabetic coma and, [Perry] 475
- in serum insulin shock therapy and, [Thorley & Kay] 148
- in tissue, in alloxan-diabetic rats with ketoacidosis, [Knowles & Guest] 468
- level, diabetic acidosis and, [Nabarro & others] 473
- metabolism, in diabetic acidosis, [Nabarro & others] 474
- POTASSIUM CHLORIDE**, pyruvate metabolism in *Lactobacillus arabinosus* and, [Nossall] 314
- POTASSIUM ETHYLXANTHATE**, diabetogenic action of, [Kadota & Midorikawa] 311
- POTASSIUM FERRICYANIDE**, reduction by insulin preparations, [Pruner] 316
- PROSTIGMINE**, pancreas stimulation and, in diagnosis of chronic recurrent pancreatitis, [Malinowski] 136
- PROTAMINE ZINC INSULIN**, action, duration, [Gerritzen] 309
- assay by fibril formation and precipitation, [Foster & others] 308
- comparison with NPH Insulin, [Arduino & Vieira da Silva] 219; [Richer] 58
- comparison with other types, [Iturbe Zabaleta & others] 311; [Jauregui] 311; [Sugar & Alpert] 146
- diabetes and, complicated by rheumatoid arthritis and psoriasis, [Portuondo y de Castro & Cano] 315
- diabetes and, in an outpatient clinic, [Megevand] 404
- diabetes and, severe, [Lobo Onell] 402
- POTASSIUM IODIDE**, arteriosclerosis and, [Mardones & others] 137
- POTASSIUM SALTS**, diabetic acidosis and, [Tolstoi] 482
- POTATO**, enzymes concerned in the synthesis of starch, [Gilbert & Patrick] 400
- PRE-ECLAMPSIA**, etiology, [Dailey & Benson] 305; [Green & others] 50
- in pregnancy, hyperthyroidism and, [Dailey & Benson] 305
- plasma pentose levels in, significance, [Green & others] 50; [Sophian] 143
- PREGNANCY**, diabetes and, [Cardonnet] 397; [Cramer] 126; [Hall & Tillman] 132; [Pedersen] 405; [Whitley] 408;



[correspondence, D. Hurwitz] \*331;  
[Williams] \*37  
diabetes and, acidosis in, [Van  
Bouwdyk Bastiaanse & Sindram] 234  
diabetes and, complication, "embryo-  
pathia diabetica," [Kloos] 53  
diabetes and, diet in, [Van Bouwdyk  
Bastiaanse & Sindram] 234  
diabetes and, fetal mortality and,  
[Bachman] 394; [Barns & others] 42;  
[Hall & Tillman] 132  
diabetes and, fetus and, [Fouracre  
Barns & Morgans] 399; [Kloos] 53;  
[Petrick] 231; [Bittmiller & Nicodemus]  
476  
diabetes and, hypoglycemia in, [Van  
Bouwdyk Bastiaanse & Sindram] 234  
diabetes and, management, [Fouracre  
Barns & Morgans] 399; [Grier &  
Newcomb] 131; [Oakley & Peel] 474;  
[Rittmiller & Nicodemus] 476; [Van  
Bouwdyk Bastiaanse & Sindram] 234  
diabetes and, newborn infant and,  
[Bachman] 394; [Cerrard] 222;  
[Grier & Newcomb] 131; [Kloos] 53  
fructose in blood in, [Wallenfels] 322  
hyperthyroidism in, [Dailey & Benson]  
305  
pre-eclampsia in, hyperthyroidism and,  
[Dailey & Benson] 305  
Protamine Zinc Insulin in, effect on  
fetal development, [Lichtenstein &  
others] 312  
toxemia in, hyperthyroidism and,  
[Dailey & Benson] 305  
urine in, paper partition chromatog-  
raphy of sugars in, [Zilliacus & Roos]  
408  
PREGNENOLONE, effect on induced  
convulsions, [Vicari & others] 483  
PRIODAX, effect on blood sugar and  
non-protein nitrogen, [Lominack] 53  
PRISCOLINE, diabetic glycosuria and,  
[Sasson] 58  
effect on blood vessels in toes of dia-  
betics, evaluation, [Handelman &  
others] 466  
effect on retinal vessels in diabetes,  
[Cholst & others] 397; 462  
in diabetes, fasting blood sugar and,  
[Sasson] 58  
vasodilator effect, in ischemic extremi-  
ties, [Rottenstein & others] 141  
vasodilator effect, in ophthalmology,  
[Stern] 407  
PROPYLTHIOURACIL, in diabetes com-  
plicated by hyperthyroidism, [Bowen &  
Lenzner] 125; [de Castro & Teixeira]  
397  
glycosuria and, [Martinez] 471  
implants, juvenile diabetes and, [Win-  
ter & others] 485  
in pregnancy, effect on fetal develop-  
ment, [Lichtenstein & others] 312  
requirements, effect of *p*-hydroxypro-  
piophenone on, [Brady & Hedges]  
396  
PROTEINS, arteriosclerosis and, [Barr  
& others] 123  
deficiency, effect on blood and liver  
glutathione levels, [Edwards & Wes-  
terfield] 464  
effect on arginase activity in alloxan-  
diabetic liver, [Kochakian & others]  
469

glucose converted from, [Bancroft &  
Drury] 41  
in bread, diabetics and, [Anonymous]  
393  
in breakfast, effect on blood sugar  
level, [Bryant & others] 303  
in cerebrospinal fluid, in diabetic  
neuropathy, [Epstein] 464  
in serum, diabetes and, [Waife &  
others] 321  
in urine, cortisone therapy for nephro-  
tic syndrome and, [Holmes & others]  
225  
metabolism, carbohydrates and, [Mun-  
ro] 138  
metabolism, fat and, [Munro] 138  
metabolism, riboflavin excretion and, in  
diabetes, [Pollack & Bookman] 315  
PRURITIS, allergy to insulin and,  
[Bland] 302  
diabetes and, [Guy] 224; [Kuntze &  
Otto] 311  
PRURITUS PUDENDI, diabetes and,  
[Guy] 224  
PRURITUS VULVAE, diabetes and,  
[Guy] 224  
PSEUDOCYST, complication of chronic  
pancreatitis, [Rose] 317  
PSORIASIS, diabetes and, ACTH in,  
[Portuondo y de Castro & Cano] 315  
PSYCHOSES, insulin shock therapy and,  
insulin tolerance tests in, [Perkoff &  
Tyler] 56  
PSYCHOTICS, hyperglycemic factor, in  
urine, [Walker & Mayer-Gross] 150  
PULSE RATE, effect of potential vasodi-  
lators on, [Sayen & others] 406  
in insulin hypoglycemia, effect of SKF  
501 on, [Meilman & Altschule] 472  
PYELONEPHRITIS, diabetes and, [Edi-  
torial] 128  
diabetes and, mortality, [Heintzelmann]  
467  
PYRORACEMIC ACID, curves, effect of  
galactose and glucose administration  
on, [Alslev] 459  
PYRUVATE, in blood [Hills & others]  
\*351  
metabolism, by rat diaphragm muscle,  
[Villev & others] 321  
metabolism, in *Lactobacillus arabinosus*,  
effect of glucose and potassium  
on, [Nossal] 314  
oxidation, glucose and hexokinase re-  
quirement, [Rabinovitz & others] 140  
oxidation, in retina, [Illing & Gray] 52  
PYRUVIC ACID, in blood, effect of  
fructose on, [Miller & others] 404  
in blood, effect of glucose on, [Miller  
& others] 404  
in blood, glucose tolerance test and,  
in diagnosis of diabetes and Cush-  
ing's syndrome, [Wilder] 322  
output in diabetic ketosis, [Craig &  
others] 462  
PZI: See Protamine Zinc Insulin

## Q

Q-ENZYME, preparation from potato,  
[Gilbert & Patrick] 400  
QUINIDINE, QT prolongation and, [Bel-  
let & Finkelstein] 43

## R

RENAL DIABETES, development of dia-  
betes mellitus from, [Graf & Hering]  
465  
RENAL GLYCOSURIA: See Glycosuria,  
renal  
RESEARCH, financial support of [Edi-  
torial] \*324  
RETINA, blood vessels of, angiospastic,  
Priscoline in, [Stern] 407  
blood vessels of, diabetes and, effect of  
Priscoline on, [Cholst & others] 397;  
462  
lesions in, diabetes and, [Clarke] 305  
metabolism, alloxan diabetes and, [Ill-  
ing & Gray] 52  
vascular system examination, in estima-  
tion of condition of vascular system  
in general, in juvenile diabetes,  
[Pitesky & others] 57  
veins, occlusion of, [Becker & Post] 43  
venous changes, diabetes and, [Bedell]  
301  
RETINITIS, diabetic, [Weinstein] 408  
diabetic, hyperglycemia and, [Dana &  
others] 305  
diabetic, Priscoline in, [Sasson] 58  
diabetic, rutin in, [Palmer & others]  
56; 474; [Sherrill] 233  
diabetic, uncontrolled diabetes and,  
[Sherrill] 233  
proliferans, diabetes and, [Bedell] 301  
RETINOPATHY, diabetes and, [Igershei-  
mer] 226; [Kerr & others] 402; [Ramirez  
Pane] 316; [Root] 317; [Scott] 142;  
[Weinstein] 408; [Wilson & others] \*34  
diabetes and, central vein occlusion  
and, [Becker & Post] 43  
diabetes and, choline in, [Engelson]  
399  
diabetes and, incidence, [Givner] 465  
diabetes and, [Mann] 470  
diabetes and, venous changes, [Bedell]  
-301  
RHEUMATISM, blood sugar behavior  
following Insulin-Novo administration,  
[Stepantschitz & Kresbach] 144  
RHEUMATOID arthritis: See Arthritis,  
rheumatoid  
RIBOFLAVIN, deficiency, carbohydrate  
metabolism and, [Axelrod & others] 41  
elimination, diabetes and, [Travia &  
others] 482  
excretion, in protein metabolism in dia-  
betes, [Pollack & Bookman] 315  
RIBOSE-5-PHOSPHATE, oxidation, by  
enzymes, [Dickens & Glock] 398  
RUMPLESSNESS, in duck embryos, in-  
sulin and, [Landauer] 228  
RUTIN, alloxan diabetes and, blood sugar  
levels in, [Swift & others] 147  
diabetic retinitis and, [Palmer & others]  
56; 474; [Sherrill] 233  
epinephrine action and, [Schiller] 59  
vasoconstrictor activity, [Schiller] 59

## S

SALICYLATES, carbohydrate metabo-  
lism and, [Bornstein & others] 302  
diabetic glycosuria and, [Bornstein &  
others] 302  
effect on glycosuria, blood sugar and  
liver glycogen of alloxan-diabetic  
rat, [Smith & others] 480



- SALINE**, acute pancreatitis and, [Gage & Gillespie] 49
- SALINE-LACTATE SOLUTION**, diabetic acidosis and, [Nabarro & others] 473
- SALT**, in orthostatic hypotension, in diabetes, [Levitt & Handelsman] 134
- SCHIZOPHRENIA**, evaluation of adrenocortical functions in, [Jacobs & others] 468
- hyperglycemic factor in urine of [Morgan & Pilgrim] 473
- SCIATIC NERVE BLOCK**, vasodilation of lower extremity and, [Marmer] 471
- SCURVY**, insulin secretion in, glutathione and dehydroascorbic acid content of tissue and, [Banerjee & others] 300
- SECRETIN TEST**, cancer of the pancreas and, [Brown & others] 396
- tumors of the pancreas and, [Dreiling] 398
- SERUM**, amylase, diagnostic value, in pancreatic disease, [Malinowski] 136
- diabetic, ultracentrifugal studies of [Hanig & Lauffer] \*447
- insulin-resistant, effect on insulin combination with rat diaphragm, [Marsh & Haugaard] 404
- lipoproteins and cholesterol in normal and young diabetics in relation to vascular complications [Keiding & others] \*434
- SERUM PROTEINS**, in glomerulosclerosis [Rifkin & Petermann] \*28
- SEX**, alloxan diabetes and, [Beach & others] 42
- diabetes and, in partially pancreatectomized rats, [Rodriguez] 476
- glucose tolerance and, [Scow & Foglia] 142
- hormones, experimental diabetes and, [Houssay] 51
- SHOCK**, electric: See Electric shock
- ischemic carbohydrate metabolism in, [Stoner & others] 481
- ischemic, effect on hepatic phosphorylysis of glycogen, [Cordier & others] 397
- mechanism, [Stoner & others] 481
- nucleotide, carbohydrate metabolism in, [Stoner & others] 481
- SIMMOND'S DISEASE**, diagnosis, [Robertson & Kirkpatrick] 317
- SKELETAL SYSTEM**, changes, diabetes and, [Hernberg] 467
- SKF 501**, effect on cardiovascular manifestations of insulin hypoglycemia, [Meilman & Altschule] 472
- 688A, effect as potential vasodilator, [Sayen & others] 406
- SKIN**, circulation, effect of rutin on, [Schiller] 59
- lesions, diabetes and, [Kerr & others] 402
- reactions, insulin and, [Grieve & others] 310; [Paley] 315; [Dolger] 463; [Paley & Tunbridge] \*22
- SODIUM**, metabolism, in diabetic acidosis, [Nabarro & others] 474
- in tissue, in alloxan-diabetic rats with ketoacidosis, [Knowles & Guest] 468
- SODIUM ACETOACETATE**, effect on blood sugar level, [Nath & Sahu] 474
- lactic and ascorbic acid changes in blood and, effect of insulin and amellin on, [Nath & Chakrabarti] 314
- SODIUM CHLORIDE**, effects, in alloxan diabetes, [Chute & others] 46
- SODIUM DIETHYLDITHIOCARBAMATE**, diabetogenic action of, [Kadota & Midorikawa] 311
- SODIUM FLUOROACETATE**, acidosis and, [Beatty & West] 42
- SODIUM SALICYLATE**, effect as potential vasodilator, [Sayen & others] 406
- SOMATOTROPIN**, p-hydroxypropiophenone and, [Brady & Hedges] 395
- SONG OF DIABETES**, a poem, [Striker] \*492
- SORBITOL**, insulin effect on cell permeability to, [Wick & Drury] 152
- metabolism, [Blakely] 43; [Wick & others] 322
- metabolism, in alloxan diabetes, [Stetten & Stetten] 145
- SPECTROPHOTOMETRY**, glycogen determination in tissues, [Van der Kleij] 234
- SPINAL CORD**, atherosclerosis, diabetes and, [Bunting] 45
- SPLANCHNIC BLOCK**, acute pancreatitis and, [Gage & Gillespie] 49
- SPLEEN**, blood flow of, insulin and, [Bearn & others] 220
- glutathione content of, in scurvy, [Banerjee & others] 300
- STAINING**, of islet cells of pancreas, [Bencosme] 394
- STATISTICS**, Diabetes [Committee on Statistics] \*66; \*414
- world mortality from diabetes [Dublin & Marks] \*205
- STARCH**, synthesis, enzymes concerned in, [Gilbert & Patrick] 400
- STEATORRHEA**, glucose absorption from duodenum in [Taylor & Wightman] 481
- STERILITY**, obesity from hormonal disorder and, [Kasten] 402
- STEROID DIABETES**, differential diagnosis, [Wilder] 322
- STEROIDS**, adrenal, glucose formation and, [Segaloff & Many] 142
- excretion, diabetic ketosis and, [Stowers] 145
- STOMACH**, aberrant pancreatic tissue in, [Allen & others] 393
- acidity, effect of acute and chronic fear on secretion of hydrochloric acid [Mahl] 470
- effect of pancreatectomy on, [Weigen & others] 484
- glucose absorption, in pure strain mice, [Fenton & others] 464
- surgery, blood sugar curves and, [Bracci & Lorenzini] 395
- STREPTOMYCIN**, eviscerate rat survival and, [Ingle & Nezamis] 52
- pneumaturia and, [Czebrinski & Karl] 46
- STRESS**, cold, effect of alloxan diabetes on adrenal gland response to, [Shepherd & others] 479
- STRESS**, diabetes and, [Hinkle & Wolf] 310; [Annotations] 459
- effect on blood glucose, [Hinkle & Wolf] \*383
- effect on blood glutathione, [Grunert & Phillips] 51
- effect on diuresis in diabetes, [Hinkle & others] 51
- glycogen synthesis and, in adipose tissue, [Engel] 128
- hypoglycemic eosinopenia and, [Pfeiffer & others] 315
- SUCARYL SODIUM**, in tissue, [Taylor & others] 320
- SUCCINIC ACID**, acidosis and, [Beatty & West] 42
- SUCCINOXIDASE**, activity, in liver, adrenalectomized and hypophysectomized alloxan diabetic rat, and, [Wollman & Scow] 154
- inhibition of, [Shideman & Rene] 59
- SUGARS**, determination, copper reagents in, [Somogyi] 319
- in urine, paper partition chromatography determination in pregnancy, [Zilliacus & Roos] 408
- invert, tolerance after intravenous infusion, [Weinstein] 152
- reducing, colorimetric estimation of, [Fairbridge & others] 129
- reducing, in urine, identification, [Sophian & Connolly] 233
- SULFHYDRYL**, effect on diabetogenic action of alloxan, [Sen & Bhattacharya] 479
- in plasma, effect of x-radiation, radiomimetic substances and surgical trauma on, [Shacter & others] 478
- in tissues, experimental diabetes and [Martinez] 471
- SULFONAMIDES**, experimental diabetes and, [Alves] 41
- SULFUR COMPOUNDS**, alloxan diabetes and, [Houssay & others] 52
- pancreatic diabetes and, [Houssay & others] 52
- SURGERY**, amputation of lower extremity [Silbert] \*297
- diabetes and, [Rolland] 406; [Sabatier] 141
- diabetes and, management, [Cochrane & Gross] 125; [Colwell] 46
- gastric, hypoglycemia following, [Greif & Morol] 50
- SYMPATHECTOMY**, lumbar, arteriosclerosis of lower extremities and, [Edwards & Crane] 307
- lumbar, Charcot joints in diabetic neuropathy and, [Lister & Maudsley] 229

T

- TB.**, tuberculous diabetes and, [Vieth] 483
- TEARS**, chloride level in, [Giardini & Roberts] 49
- glucose level in, [Giardini & Roberts] 49
- TEMPERATURE**, effect of potential vasodilators on, [Sayen & others] 406
- of skin, in evaluation of effects of Priscoline in blood vessel dysfunction in diabetes and, [Handelsman & others] 466
- TEPHROSIA PURPURA** var. **PUMILA**, hypoglycemic effect, [Swift & others] 147
- TESTOSTERONE PROPIONATE**, effect on arginase activity in alloxan-diabetic liver, [Kochakian & others] 469

diabetes and, effect on responsiveness to insulin, [Zimmerman & others] 235  
 effect on induced convulsions, [Vicari & others] 483  
 effect on metabolism in diabetes with thyrotoxicosis, [Kinsell & others] 227  
 fat metabolism and, in diabetes and thyrotoxicosis, [Kinsell & others] 227  
 in diabetic ketosis, steroid excretion and, [Stowers] 145  
 ketone metabolism and, in diabetes and thyrotoxicosis, [Kinsell & others] 227  
**TETRAETHYLAMMONIUM**, hypoglycemic effect of, [Collazo] 126  
**TETRAZOLIUM**, colorimetric estimation of reducing sugars and, [Fairbridge & others] 129  
**THIAMINE**: See Thiamine hydrochloride  
**THIAMINE HYDROCHLORIDE**, deficiency, fat synthesis from carbohydrate and, [Gruber] 224  
 diabetic coma and, phosphorylation of thiamine and, [Lichtenbelt & Florijn] 312  
 diabetic coma and, pyruvate content of blood, [Lichtenbelt & Florijn] 312  
 phosphoric esters of, diabetes and, [Montes] 404  
 phosphorylation, insulin and, [Siliprandi & Navazio] 479  
 phosphorylation, insulin and, in diabetic rat, [Siliprandi & Siliprandi] 319  
**THIOSEMICARBAZIDE**, diabetogenic action of, [Kadota & Midorikawa] 311  
**THIOURACIL**, alloxan activity and, [Martinez] 471  
 thyroidectomy and, effect on sulphydryl content in tissues, [Martinez] 471  
**THROMBOSIS**, coronary, diabetes and, [Robinson] 317; [Weinstein] 151  
**THYROIDECTOMY**, glucose tolerance and, [Scow & Foglia] 142  
 pancreatic diabetes and, [Neal & others] 231  
 effect on sulphydryl content in tissues, [Martinez] 471  
**THYROTROPIN**, p-hydroxypropionophenone and, [Brady & Hedges] 395  
**THYROXIN**, effect on basal metabolic rate of obese, diabetic mice, [Mayer & others] 472  
 glucose permeability in erythrocytes and, [Yang] 154  
**TISSUE**, electrolytes, in alloxan-diabetic rats with ketoacidosis, [Knowles & Guest] 468  
 fatty, glycogen synthesis and, effect of insulin, adrenal cortex and cold, [Engel] 128  
 fatty, glycogen synthesis and, enzymes concerned in, [Creasey & Gray] 397  
 fatty, metabolism, effect of insulin on, [Haugaard & Marsh] 466  
 insulin binding in, action, [Stadie & others] 407  
 metabolism, potassium deficiency and, [Fuhrman] 130  
 pancreatic, in the stomach, [Allen & others] 393

pancreatic, transplantation of, [Brown-ing & Resnik] 303  
 sucaryl sodium in, [Taylor & others] 320  
**TITRATION**, amperometric, blood glutathione determination and, [Bidmead & Watson] 301  
**a-TOCOPHEROL**, diabetic gangrene and, [Shute & Shute] 318  
**TOES**, infections, in diabetes, penicillin ointment in, [Jablonsky] 226  
**TOXEMIA**, of pregnancy, etiology, [Dailey & Benson] 305  
 of pregnancy, hyperthyroidism and, [Dailey & Benson] 305  
**TRAUMA**, surgical, plasma polysaccharide and, [Shacter & others] 478  
 surgical, plasma sulphydryl and, [Shacter & others] 478  
**TRANSFRUCTOSIDATION**, by enzyme systems, [Edelman & Bacon] 127  
**TRISETHYLENE TRIAZINE**, plasma sulphydryl and, [Shacter & others] 478  
**TRYPSIN**, crystalline, diabetic gangrene and, [Samuels] 232  
 effect on action of insulin, [Phillips] 405  
 in pancreas, effect on x-ray radiation on, [Rauch & Stenstrom] 406  
**TRYPTAR**, diabetic gangrene and, [Samuels] 232  
**TUBERCULOSIS**, diabetes and, [Ferrara] 308; [Montenero & Ettore] 55; [Dillon & others] \*283  
 diabetes and, incidence, [Vieth] 149  
 tuberculosis and, mortality, [Heintzelmann] 467  
 diabetes and, in Philadelphia, [Boucrot & others] 302  
 diabetes and, in post-war years, [Berger & Zuleger] 43  
 diabetes and, prognosis, [Ferrara] 308  
 diabetes and, therapy, [Vieth] 483  
 experimental, in cortisone-treated and alloxan-diabetic rats, [Roche & others] 476  
 pulmonary, myasthenia gravis and diabetes as complications of, [Schantz] 478  
**TUBULAR TRANSPORT MECHANISM**, [Shideman & Renel] 59

U

**URIC ACID**, diabetogenic action and, [Grunert & Phillips] 131  
 metabolism in liver, alloxan formation and, [Grunert & Phillips] 131  
**URINARY PROTEINS**, in glomerulosclerosis [Rifkin & Petermann] \*28  
**URINE**, hyperglycemic factor in, psychotics and, [Walker & Mayer-Gross] 150  
 sugar in, in alloxan diabetes, effect of meso-oxalic acid salts on, [Kobayashi & others] 468  
**UROPEPSIN**, excretion, effect of insulin coma on, [Jacobs & others] 468

V

**VAGISECTION**, effect on pancreatic secretion, [Dreiling & others] 398  
**VAGUS NERVE**, insulin test for continuity of, [Hollander] 401

stimulation, effect on pancreatic secretion, [Dreiling & others] 398  
**VASCULAR DISEASE**: See Blood vessels  
**VAS DEFERENS**, calcification, diabetes and, [Wilson & Marks] 153  
**VASODILATATION OF LOWER EXTREMITY**, sciatic nerve block and, [Marmer] 471  
**VERATRIN SULFATE**, effect on carbohydrate metabolism, [Collazo] 126  
**VITAMIN B<sub>1</sub>**, administration, rectal, in diabetes, [Buttarni & Baronchelli] 396  
 insulin and, synergistic action on glycemia, [Stutinsky] 481  
**VITAMIN B<sub>2</sub>**, insulin and, synergistic action on glycemia, [Stutinsky] 481  
**VITAMIN B<sub>6</sub>**, insulin and, synergistic action on glycemia, [Stutinsky] 481  
**VITAMIN B<sub>12</sub>**, alcoholism associated with diabetes and, [Menof] 404  
 diabetes and, [Menof] 404  
 dosage, neurologic manifestations of diabetes in, [Sancetta & others] 141  
 fatty degeneration and, [Menof] 404  
 insulin and, synergistic action on glycemia, [Stutinsky] 481  
 pernicious anemia and, [Menof] 404  
 polyneuritis and, [Menof] 404  
**VITAMIN C**, insulin and, synergistic action on glycemia, [Stutinsky] 481  
**VITAMIN E**, administration, rectal, in diabetes, [Buttarni & Baronchelli] 396  
 effect on incidence of alloxan diabetes, [Rodriguez & Krehl] 477  
**VITAMIN P**, glucose permeability in erythrocytes and, [Yang] 154  
 vasoconstrictor activity, [Schiller] 59  
**VITAMINS**, carbohydrate metabolism and, [Hackedorn] 131

W

**WARBURG APPARATUS**, construction, [Niemeijer] 231  
**WARTIME EMERGENCY**, diabetic therapy and, [Editorial] 306  
**WATER**, composition, effect of glucose on, in adrenalectomized rats, [Dury] 463  
 excretion, stress and, [Hinkle & Wolf] 310  
 in pancreas, excretion of, [Hildes & others] 401  
 loss, diabetic acidosis and, [Nabarro & others] 473  
 loss, stress diuresis and, [Hinkle & others] 51  
 in tissue, in alloxan-diabetic rats with keto-acidosis, [Knowles & Guest] 468  
**WEIGHT**: See also Obesity  
 in alloxan diabetes, effect of meso-oxalic acid salts on, [Kobayashi & others] 468  
 loss, low-fat and low-carbohydrate diets and, [Cederquist & others] 304  
**WILKERSON-HEFTMAN BLOOD SUGAR TEST**, evaluation, use by general practitioner, [Margolin & Gentry] 471  
**WORK PERFORMANCE**, blood glucose values and, effect of insulin on, [Ingle & others] 226

**X**

- XANTHINE OXIDASE, in liver, effect of protein deficiency on, [Edwards & Westerfield] 464  
 XANTHOMA, hypercholesteremia and hypercholemia in, [Friedman & others] 400  
 XANTHOMA DIABETICORUM, diabetes and, [Guy] 224  
 X-RAY, effect on secretion of pancreas, [Rauch & Stenstrom] 406

- plasma polysaccharide and, [Shacter & others] 478  
 plasma sulphydryl and, [Shacter & others] 478  
 XYLOSE, cataract formation and, [Sterling & Day] 319  
 fermentation, by bacteria from sheep rumen, [Heald] 310

**Z**

- ZINC, effects on insulin activity, [Hallas-Moller & others] 465

- metabolism, alloxan diabetes and, [Maske & others] 230  
 in tissues, in alloxan diabetes, [Stampfl & others] 233  
 in tissues, in dithizone diabetes, [Stampfl & others] 233  
 in urine, dithizone diabetes and, [Wolff & others] 235

- ZINC-INSULIN PREPARATIONS, severe diabetes and, [Hallas-Moller & others] 466

## AUTHOR INDEX

In this Index are the names of the authors of articles which have appeared in *DIABETES* and those whose articles have been abstracted in the *Journal* during 1952. The asterisk (\*) preceding the page reference indicates that the article appeared in full in *DIABETES*.

For subject index see page 478.

**A**

- Abrahamson, E. M., 218  
 Abrams, W. B., 218  
 Adams, L., 230  
 Adams, T. W., 408  
 Aksevan, J., 219  
 Alagille, 219, 394  
 Albrink, M. J., 218  
 Allan, F. N., \*325  
 Allen, F. M., \*63  
 Allen, H. N., 137  
 Allen, R. K., 393  
 Alman, R. W., 130  
 Almen, M. C., 322  
 Alpert, L. K., 146, 235  
 Alslev, J., 459  
 Altschule, M. D., 473  
 Altszuler, N., 460  
 Alves, M. A., 41  
 Ammentorp, P., 313  
 Anfinson, C. B., 393  
 Anguiano, G., 230  
 Annotations, 393, 459  
 Anonymous, 300, 393, 460  
 Appelman, D. H., 131  
 Arduino, F., 218, 393  
 Arteta, J. L., 460  
 Ashton, N., 41  
 Ashworth, M. A., \*358  
 Axelrod, H. E., 41  
 Ayres, P. R., 141  
 Azerad, E., 219, 394, 460

**B**

- Bacchus, H., 460  
 Bachman, C., 394  
 Bacon, J. S. D., 127  
 Bailey, C. C., 136  
 Baird, M. M., 225  
 Baker, N., 461  
 Balmain, J. H., 219  
 Balme, H. W., 219

- Bancroft, R. W., 41  
 Banerjee, S., 300, 461  
 Bangle, R., Jr., 230  
 Barach, J. H., 300, \*411, \*441  
 Barker, O. B., 220  
 Barlow, G., 481  
 Barnes, R. H., 44  
 Baronchelli, 396  
 Barr, D. P., 123  
 Bartels, E. D., 42, 124  
 Bartlett, L. C., 401  
 Bass, A. D., 126  
 Bastenie, P. A., 394  
 Bates, M. W., 472  
 Bauman, E. O., 461  
 Bauman, L., 220  
 Baumgarten, F., 230, 233, 235  
 Baumgartner, M. M., 42  
 Beach, E. F., 42, 461  
 Bearn, A. G., 124, 220  
 Beaser, S. B., 220  
 Beatty, C. H., 42  
 Beck, I. A., 53  
 Beck, J. C., 472  
 Becker, B., 43  
 Bedell, A. J., 301  
 Beegle, R. M., 304  
 Beidleman, B., 126, 301  
 Belavady, B., 300  
 Bell, E. T., \*341  
 Bellet, S., 43, 218  
 Beltran Bigorra, F., 301  
 Bencosme, S. A., 394  
 Bene, B., 52  
 Benjamin, S., 220  
 Benson, R. C., 305  
 Berger, G., 43  
 Berger, H., 301  
 Berkowitz, S., 144  
 Berner, P. W., 220  
 Bernstein, D. E., 124  
 Best, C. H., 52, \*257  
 Bhattacharya, C., 478  
 Bidmead, D. S., 301

- Billing, B., 220  
 Billings, C. H., 124  
 Binkley, F., 124  
 Bischoff, F., 220  
 Black, D. A. K., 395  
 Black, K. O., 301  
 Blackwell, C. C., 395  
 Blades, A. N., 322  
 Blair, J. L., 224  
 Blakley, R. L., 43  
 Blandi, M., 302  
 Blatherwick, N. R., 42, 461  
 Blickman, J. R., 400  
 Bloom, W. L., 44, 54  
 Blottner, H., 124  
 Boas, E. P., 461  
 Bogoch, A., \*87  
 Bollman, J. L., 224, 395  
 Bond, E. E., 57  
 Bondy, P. K., 395  
 Bone, A. D., 150, 151  
 Bookman, J. J., 315  
 Booth, R. G., 129  
 Bornstein, J., 44, 124, 302, 479  
 Bosshardt, D. K., 44  
 Boyle, E., 393  
 Boucot, R., \*283, 302  
 Bowen, B. D., 125  
 Bowen, F. H., 44  
 Bowen, T. J., 44  
 Boyer, P. D., 140  
 Bracci, U., 395  
 Brada, Z., 45  
 Bradshaw, P. J., 42, 461  
 Brady, R. O., 395  
 Bresgen, C., 45  
 Brewer, W. D., 304  
 British Insulin Manufacturers' Biological Sub-Committee and the Department of Biological Standards, National Institute for Medical Research, 462  
 Brodribb, H. S., 396

# INDEX 1952

Brofman, B., 462  
Brown, H., 462  
Brown, E. M., Jr., 303  
Brown, G. D., 402  
Brown, R. K., 393, 396  
Brown, W. T., 143  
Brownell, K. A., 396  
Browning, H., 303  
Bruger, M., 125  
Bryans, F. E., \*358  
Bryant, K., 303  
Buchanan, A. R., 479  
Bunim, J. J., 303  
Bunting, J. J., 45  
Bruns, L. E., 53  
Busey, J., 44  
Buttarni, 396  
Butts, J. S., 147  
Byers, S. O., 397, 400

## C

Campbell, J., 125  
Candela, J. L. R., 220  
Cano, R. M., 315  
Cardonnet, L. J., 304, 319, 397  
Carne, H. O., 136  
Carp, S., 144  
Carr, J. H., 304  
Carr, T. L., 45  
Carroll, F. D., 304  
Casabuena Puig, A., 301  
Cass, Victoria, M., \*194  
Cederquist, D. C., 304  
Chaikoff, I. L., 49, 57, 130, 146, 461, 464  
Chakrabarti, C. H., 314  
Chanis, R., 304  
Chen, K. K., 488  
Cheshire, J. D., 230  
Chimenes, H., 232  
Cholst, M. R., 397, 462  
Christensen, G. M., 124  
Chute, A. L., 45, 52  
Cieresko, L. S., 44  
Clarke, W. T. W., 305  
Clowes, G. H. A., Jr., 46  
Cochran, J. B., 407  
Cochranc, H. A., 125  
Coggins, W., 399  
Cohen, M., 126  
Cohn, C., 46  
Cole, L., 219  
Collazo, J. A., 126  
Collens, W. S., 305  
Collins, E., 481  
Colwell, A. R., 46, \*73, \*328, \*332  
Comfort, M. W., 397  
Commons, R. R., 220  
Conan, N. J., 129  
Conger, G., 51  
Connolly, V. J., 233  
Conrad, H., Jr., 466  
Cooke, A. M., 56  
Cooper, D. A., \*283, 302  
Copenhaver, J. H., 305  
Cordier, D., 397  
Cordier, G., 397  
Cortesi, J. B., 140  
Co Tui, 483  
Cowgill, C. R., 464  
Craig, J. W., 404, 462  
Cramer, H. I., 126  
Crampton, J. H., 56, \*201, 475  
Crane, C., 307  
Creasey, N. H., 397

Cretcher, L. H., 148  
Cummings, M. M., 477  
Czebrinski, E. W., 46

## D

Dailey, M. E., 305  
Dana, G. W., 235, 305  
Dana, G., 462  
Daum, K., 303  
Davidson, L. W. F., 125  
Davidson, S., 46  
Davies, H. L., 224  
Davin, J. C., 320  
Davis, C. D., \*201  
Day, P. L., 319  
De, U. N., 473  
Deb, C., 300  
de Brux, J., 394  
de Castro, A., 397  
De Filippis, V., 463  
DeMoor, P., 54, 303  
De Oya, J. C., 46  
de Rosario, A., 310  
DeZoysa, V. P., 126  
Diaz, C. J., 46  
Dickens, F., 397  
Dickson, H. M., 464  
Dickie, M. M., 472  
Diermeier, H. F., 126  
Dillon, E. S., \*283, 302  
Dill-Russell, A. S., 398  
DiLuzio, 322  
Distefana, H. S., 126  
Dobson, E. L., 57  
Dolger, H., 463  
Dominguez, A., 139  
Donaldson, R. M., Jr., 144  
Dragstedt, L. R., 231  
Dreiling, D. A., 398  
Drucker, W. R., 404, 462  
Druckerman, L. J., 398  
Drury, D. R., 41, 47, 152  
Dublin, L. I., \*205  
Ducas, P., 407  
Duncan, G. G., 126, 301, 305  
Dunlop, D. M., 48, 222  
Dunsing, D., 304  
Dury, A., 127, 463  
Duveau, A., 397  
Dziri, A., 149

## E

Eareckson, V. O., 463  
Earle, D. P., 129  
Edelman, J., 127  
Eder, H. A., 123  
Editorials, 47, 48, 127, 128, 306, 307, 398, 463  
Edwards, C. J., 51  
Edwards, E. A., 307  
Edwards, S., 464  
Ehrlich, M., 144  
Eliachar, E., 407  
Elkind, M., 144  
Elkinton, J. R., 303  
Ellenberg, M., \*16  
Elman, R., 308, 399  
Engel, F. L., 128, 399  
Engel, R., 399  
Engelberg, H., \*425  
Engelhardt, H. T., 50  
Engelson, G., 399  
Enoch, I., 124  
Entenman, C., 57, 464, 478

Epstein, S. H., 129, 308, 464  
Ermala, P., 129  
Eroz, K., 308  
Ettore, F., 55  
Evans, M. A., 129  
Eversole, S., 462  
Eversole, S. L., 235, 305  
Evertzen, A., 312

## F

Faber, M., 48  
Fairbridge, R. A., 129  
Farber, S. J., 129  
Farr, C. F., 308  
Faulconer, A., Jr., 395  
Fazekas, J. F., 130  
Fazio, A. N., 395  
Feasby, W. R., 307  
Fedor, E., 481  
Feiler, R., 222  
Feinberg, H., 464  
Feinblatt, T. M., 48  
Feldman, F. F., 55  
Felts, J. M., 130  
Feng, C. W., 124  
Fenton, P. F., 464  
Ferguson, E. A., 48  
Ferguson, M. H., 400  
Ferrara, M. A., 308  
Field, J., 231  
Fineberg, J. C., 228  
Finestone, I., 318  
Finkelstein, D., 43  
Fisher, P., \*108, 399  
Flaherty, N. F., 56, 475  
Florijn, E., 312  
Foglia, V. G., 142  
Folley, S. J., 219  
Foreign Letters, 222  
Forsyth, C. C., 48, 222  
Foster, G. E., 308  
Fouracre Barns, H. H., 42, 399  
Fox, S., 58  
Fradkin, N. F., 398  
Francis, R. B., 59  
Fraser, R. S., 464  
Freeman, S., 146  
Friedman, M., 397, 400  
Fromm, S. M., 315  
Fuhrman, F. A., 130  
Fuller, C. B. S., 49  
Futterman, P., 137

## G

Gaddy, C. G., 309  
Gage, M., 49  
Gates, E. W., 130  
Geiringer, E., 49  
Gelperin, A., 218  
Gentry, H. E., Jr., 471  
Gerlich, N., 153  
Gerrard, J., 222  
Gerritzen, F., 309  
Getting, V. A., \*194  
Giardini, A., 49  
Gibbon, N., 408  
Gilady, M., 312  
Gilbert, G. A., 400  
Gilbert, P. D., 406  
Gillespie, G., 49  
Gitman, L., 131  
Givner, I., 465  
Glock, G. E., 397  
Gnassi, A. M., 228



Goddard, J. W., 230  
 Gofman, J. W., 131, 227, 304, \*425  
 Goldberg, R. C., 49  
 Goldner, M. G., 50  
 Gornall, R. G., 309  
 Govaerts, P., 465  
 Grafe, E., 50, 465  
 Gourley, D. R. E., 465  
 Graham, D. M., 131, 227  
 Grande, F., 46  
 Graubarth, H., 313  
 Gray, C. H., 52, 309, 397  
 Grayce, I., 135  
 Grayzel, H. G., 131  
 Greeley, P. O., 476  
 Green, H. N., 50, 481  
 Green, P., 400  
 Greenlee, R. G., 50  
 Greenwald, J. J., 305  
 Greif, S., 50, 224  
 Grier, R. M., 131  
 Grieve, W. S. M., 310  
 Groen, J., 400  
 Groff, A. E., 50  
 Gross, L., 125  
 Grossman, M. I., 403  
 Grotte, G., 224  
 Gruber, M., 224  
 Grunberg, A., 224  
 Crunert, R. R., 50, 51, 131  
 Guest, G. M., 54, 135, 229, \*276, 312,  
 313, 468, \*487  
 Gullberg, M. G., 41  
 Gurin, S., 224  
 Gutfreund, H., 310  
 Guy, W. B., 224  
 Gyorgy, P., 51, 58

## H

Haanes, M. L., 51  
 Hackedorn, H. M., 131  
 Haist, R. E., 129, \*358  
 Halberg, F., 399  
 Hall, G. F. M., 401  
 Hall, R. E., 132  
 Hall, V. E., 231  
 Hallas-Moller, K., 465, 466  
 Hamwi, G. J., 132  
 Handelsman, M. B., 134, 397, 462,  
 466  
 Hanig, M., \*477  
 Hansen, R. G., 132  
 Hardwig, R. P., 225  
 Hargreaves, H. P., 462  
 Harkins, H. M., 318  
 Harper, R. M. J., 132  
 Harris, H., 225  
 Hartman, F. A., 396  
 Hartree, E. F., 402  
 Harvey, S. C., 466  
 Hastings, A. B., 321  
 Haugaard, N., 404, 407, 466, 467  
 Heald, P. J., 310  
 Hedges, T., 395  
 Heiffer, M. H., 460  
 Heinlein, H., 45  
 Heintzelmann, F., 467  
 Henderson, M., \*188  
 Herapath, J. C., 133  
 Hering, H. W., 465  
 Hernberg, C. A., 467  
 Herold, A. A., Sr., 310  
 Hicks, S. P., 467  
 Hildes, J. A., 401  
 Hildreth, B. S., 133

Hildreth, E. A., 133  
 Hills, A. C., 468  
 Hills, O. W., \*351  
 Hinkle, L. E., Jr., 51, 310, \*383  
 Hoesti, L. R., 129  
 Hokin, L. E., 225  
 Hollander, F., 398, 401  
 Hopewell, J. D., 50  
 Hopkins, J. G., 468  
 Horne, G. O., 225  
 Horstmann, P., 226  
 Horwitz, O., 141, 406  
 Houssay, B. A., 51, 52, \*112  
 Hudgins, P. C., 477  
 Hymes, J. J., \*378

## I

Iannoccone, A., 463  
 Igersheimer, J., 226  
 Illing, E. K. B., 52, 309  
 Ingle, D. J., 52, 145, 226, \*345  
 Iturbe Zabaleta, I., 139, 311

## J

Jablonsky, A., 226  
 Jackson, W. P. U., 135  
 Jacob, S., 56  
 Jacobi, M., 131, 134, 312  
 Jacobs, J. S. L., 468  
 Jarlov, N. V., 133  
 Jauregui, R. H., 311  
 Jeffrey, M. R., 52, 53  
 Jersild, M., 466  
 John, H. I., 146  
 John, H. J., 226  
 Johnson, G. R. A., 133  
 Johnson, H. W., 52  
 Johnson, R. H., 56, 475  
 Jones, E. E., 45  
 Jones, H. B., 131, 227, 304, \*425  
 Jongbloed, A., 483  
 Joseph, L., 322  
 Joslin, E. P., \*1, 227, \*326, \*490

## K

Kadota I., 311  
 Kahn, S., 143  
 Kalant, N., 402  
 Kaltman, A. J., 303  
 Kamminga, C. E., 400  
 Kaplan, H. L., 468  
 Karger, Beatrice A., \*188  
 Karl, M. M., 46  
 Kasten, F. H., 401  
 Katz, B., 46  
 Kay, W. W., 148, 227  
 Keiding, N. R., \*434  
 Keilin, D., 402  
 Kellner, A., 402  
 Kepeny, T. T., 483  
 Kemp, A., 311  
 Kempe, C. H., 227, 304  
 Kennedy, M. A., 51  
 Kenny, A. J., 52  
 Kepinov, L., 311  
 Kerr, R. B., 402  
 Kersley, G. D., 52, 53  
 Kesten, B. M., 468  
 Kinash, B., \*358  
 Kinnear, T. W. G., 48, 222  
 Kinsell, L. W., 227  
 Kirkpatrick, H. F. W., 317  
 Kirtley, W. R., \*290

Kleinerman, J. I., 399  
 Kleinsasser, L. J., 403  
 Kloos, K., 53  
 Knapp, R. G., Jr., 133  
 Knowles, G. M., 53  
 Knowles, H. C., Jr., \*276, 468  
 Knutson, R. C., 224  
 Kobayashi, Y., 469  
 Kochakian, C. D., 469  
 Kolinsky, M., 46  
 Komrad, E. L., 228  
 Kowalewski, K., 394  
 Kraft, I. A., 133  
 Kraft, S. C., 470  
 Kramer, L. I., 53  
 Krehl, W., 232  
 Krehl, W. A., 477  
 Kresbach, E., 144  
 Kristal, J. J., 53  
 Kuether, C. A., 133  
 Kuntze, J., 311  
 Kvamme, E., 228

## L

Lachance, R., 312  
 Landauer, W., 228  
 Landmann, H. R., 402  
 Larsson, Y., \*449  
 Lartigue, O., 229  
 Last, J. H., 57  
 Laufer, M. A., \*447  
 Lawrence, R. D., 302, \*420, 462, 469  
 Lawry, E. Y., \*434  
 Lazarow, A., \*171, \*363  
 Lazarus, S. S., 134, 149, 312, 321, 469,  
 483  
 Lea, C. H., 406  
 Leech, R. S., 136  
 Leevy, C. M., 228  
 Lehmann, H., 469  
 Lei, H. P., 125  
 Lemarchands, H., 397  
 Lencioni, L. J., 312  
 Lens, J., 312  
 Lenzner, A. R., 125  
 Lesford, J. M., 318  
 Levine, E. A., 131  
 Levine, R., 228  
 Levitan, B. A., 53, 134  
 Levitt, L. M., 134, 397, 462, 466  
 Levy, E. S., 470  
 Lewin, J., 485  
 Lewis, D. W., 218  
 Lewis, G. T., 54  
 Liboro, O., 58  
 Lichtenbelt, H. V. M., 312  
 Lichtenstein, A., \*449  
 Lichtenstein, H., 54, 229, 312  
 Lieber, M. M., 313  
 Lieberman, Z. H., 399  
 Liere, E. J., 134  
 Lindan, O., 42  
 Linder, G. C., 135  
 Lindgren, F. T., 227  
 Lints, H. A., 148  
 Lipp, G. R., 470  
 Lips, A. C. M., 135  
 Lister, J., 229  
 Littlefield, M. S., 476  
 Liu, T. Y., 396  
 Llewellyn, J. S., 470  
 Lobo Onell, C., 402  
 Loew, E. R., 228  
 Loggan, P. B., 403  
 Logovoy, J. K., 315

Lombard, H. L., \*194  
Lominack, R. W., 53  
Long, C., 229  
Long, C. N. H., \*3, 403  
Longwell, B. B., 480  
Lopes de Almeida, A., 403  
Lorenzini, L., 395  
Lossi, H.-J., 54  
Lott, W. A., 52  
Lourau, M., 229  
Low, B. W., 470  
Lowrey, C. H., 53  
Lowy, A. D., \*441  
Lsade, W. R., 134  
Luft, R., 313  
Lukens, F. D. W., \*12, 54, 135, 303  
Lund, F., 48  
Luntz, G. R. W. N., 135, 229  
Lynn, W. S., Jr., 399  
Lyon, T. P., 131, 227

**M**

Maassen, A. P., 313  
McCallie, D. P., 227  
Machado, J. de O., 403  
Machella, T. E., 58, 484  
Macpherson, L. B., 46  
McCullagh, E. P., 472  
MacDonald, I., 301  
MacDonald, J., 308  
McEwen, C., 303  
McGhee, E. C., 54  
McIlwain, H., 230  
McIntosh, H. W., 225  
Mackay, E. M., 47, 152  
McKeague, G., 231  
Mackler, B., 54, 135, 229, 313, \*276  
McMahon, A., 137  
McMillan, F. L., 137  
McMurray, J., 396  
MacNeal, P. S., 136  
McQuarrie, I., 399  
Mahl, G. F., 470  
Malinowski, T. S., 136  
Mallett, S. P., 133  
Mandel, L., 52, 53  
Mann, G. V., 230, \*434  
Mann, M., 470  
Manning, R. P., 136  
Many, A. S., 142  
Marble, A., \*33, 124, 136, 144, 153, \*245, 471, \*487  
Marder, M. J., 322  
Mardones, J., 137  
Margen, S., 227  
Margolin, M., 471  
Margulis, R. R., 55  
Marks, J. H., 153  
Marks, H. H., \*66, \*205, \*414  
Marmer, M. J., 471  
Marsh, J. B., 404, 466, 467  
Marshall, W., 404  
Martin, C., 303  
Martin, H. E., 471  
Martinez, C., 52, 472  
Martino, T., 220  
Maske, H., 230, 233, 235  
Maudsley, R. H., 229  
Mayer, J., 472  
Mayer-Gross, W., 150  
Meade, B. W., 302, 479  
Medical Forum (Chicago), 54  
Megevand, A., 404  
Mehl, J., 471  
Meier, P., \*283, 302  
Meilman, E., 473

Mellinkoff, S. M., 133  
Menof, P., 404  
Mertens, H., 153  
Meyer, J. H., 50  
Meyer, R. K., 305  
Meythaler, F., 54  
Michaels, G. D., 227  
Michalski, J. V., 147  
Midorikawa, O., 311  
Miller, E. S., 54  
Miller, J. W., 137  
Miller, J. M., 463  
Miller, M., 404, 462  
Milman, A. E., 54  
Milne, M. D., 395  
Mirouze, J., 479  
Mirsky, I. A., 137  
Missey, W. C., 137  
Mithoefer, J., 135  
Mohnike, G., 230  
Monsalve, M. V., 137  
Montagna, C. P., 138, 230  
Montenero, D., 55  
Montes, G., 404  
Montgomery, H., 141  
Montgomery, R. C., \*117  
Morgan, A. F., 41  
Morgans, M. E., 42, 399  
Morgan, M. S., 473  
Morley, E. H., 145, 226  
Moro, E., 50, 224  
Moseley, V., 396  
Moses, C., 473  
Mowry, R. W., 230  
Moyer, J. H., 138  
Mufson, M., 475  
Mukherjee, S. K., 473  
Mulholland, H. B., 309  
Munro, H. N., 138  
Murdock, T. P., 139

**N**

Nabarro, J. D. N., 474  
Nataf, E., 219, 394  
Nataf, J., 460  
Natelson, S., 315  
Nath, M. C., 314, 474  
Nathanson, I. G., 133  
Navazio, F., 480  
Neal, W. B., Jr., 231  
Necheles H., 470  
Neurath, H., 482  
Newcomb, A. L., 131  
Newman, B. A., 55  
Nezamis, J. E., 52, 226  
Nichols, A. V., 227  
Nichols, C. J., 44  
Niemeijer, J. A., 231  
Nickerson, M., 466  
Nicodemus, R. E., 476  
Nieveen, J., 482, 483  
Nordman, L. O., 55  
Northup, D. W., 134, 481  
Nossal, P. M., 314

**O**

Oakley, W., 231, 474, 475  
O'Brien, M. J., 45  
Occhino, N. R., 55  
Ohashi, S., 469  
Ohlson, M. A., 304  
Olson, J. A., 55  
Oppenheim, E., 125  
O'Reilly, E. B., 53  
Orr, J. L., 45

Osborn, M. J., 130  
Osio, D., 314  
Osserman, Kermit E., \*16  
Ottati, F. C., \*290  
Otto, H., 311, 314  
Owens, J. E., 404, 462  
Ozer, F., 308

**P**

Palacios Bermudez, R., 139, 311  
Paley, R. G., \*22, 315  
Palmer, L. J., 55, 56, \*75, 475  
Paniagua, M. E., 139, \*373  
Papageorge, E., 54  
Parente, L., 218  
Parrish, A. E., 130, 235  
Parson, W., 309  
Patrick, A. D., 400  
Patterson, J. W., 475  
Pease, J. C., 56  
Peck, F. B., \*290  
Pedersen, J., 405  
Peel, J., 474  
Peiss, C. N., 231  
Pellegrino, E. D., 129  
Pelosio, C., 482  
Pendergrass, E. P., 484  
Pennock, L. L., 56  
Perisutti, G., 137  
Perkoff, G. T., 56  
Perlmutter, J., 481  
Perlmutter, M., 475  
Permer, E., 393  
Perry, S. M., 139, 475  
Persky, L., 56  
Petermann, Mary L., \*28  
Peters, J. H., 56  
Peters, J. P., 139, 475  
Peterson, E. S., 148  
Petersen, K., 465, 466  
Petrick, T., 231  
Petrov, V., 310  
Pfeiffer, E. F., 315  
Phillips, D. M. P., 56, 140, 405  
Phillips, P. H., 50, 51, 131  
Picard, R., 232  
Pilgrim, F. J., 473  
Pineus, J. B., 315  
Pitsky, I., 57  
Pitt, C. K., 231  
Plaza de los Reyes, M., 137  
Ploman, K. G., \*449  
Pollack, H., \*16, 315  
Portuondo y de Castro, J. M., 315  
Post, L. T., Jr., 43  
Post, L. T., 57  
Poth, E. J., 315  
Poulsen, J. E., 124  
Powell, W. J., 233  
Power, M. H., \*351  
Pozsonyi, J., 483  
Pratt, J. H., 396  
Pratt, T. D., 396  
Primo Yufera, E., 301  
Prior, J. H., 53  
Pritchard, W. H., 462  
Procopio, J., 316  
Prosiogel, R., 320  
Proud, J. D., 475  
Pruner, G., 316  
Pugh, B. L., 51

**Q**

Queries and Minor Notes, 405

**R**

Raben, M. S., 476  
 Rabinovitz, M., 140  
 Rabinowitch I. M., 316, 476  
 Ramirez Pane, R., 316  
 Ranney, R. E., 57  
 Rauch, R. F., 406  
 Ravdin, I. S., 484  
 Ravin, H. A., 56  
 Recht, L., 316  
 Redisch, W., 148  
 Reid, E., 42, 57, 124, 301, 316  
 Reinberg, M. H., 476  
 Rene, R. M., 59  
 Resnik, P., 303  
 Rhoads, J. E., 58  
 Rice, E. C., 484  
 Richards, R. K., 320  
 Richardson, R., \*283, 302  
 Richer, L. A., 58  
 Richman, A., 398  
 Ricketts, H. T., 148  
 Rifkin, H., \*28  
 Ritchie, R. C., \*87  
 Ritmiller, L. F., 476  
 Roberts, J., 49  
 Robertson, E., 469  
 Robertson, J., 476  
 Robertson, J. D., 317  
 Robinson, J. W., 317  
 Robson, G. B., 140  
 Roche, P., Jr., 477  
 Rodriguez, R. R., 232, 477  
 Rodriguez Arguelles, J., 139, 311  
 Rodriguez-Candela, J. L., 317  
 Rogers, G. R., 231  
 Rolland, C. F., 406  
 Roos, B. E., 408  
 Root, H. F., \*33, 140, 153, \*194, 317, 488, \*434  
 Rose, S., 488  
 Rose, T. F., 140, 317  
 Rosenak, B. D., 393  
 Rosenbaum, S. L., 139  
 Rosenkrantz, J. A., 133  
 Rosenman, R. H., 400  
 Ross, E. J., 317  
 Rottenstein, H., 141  
 Rouques, L., 58  
 Rowlinson, H. R., 318  
 Russ, E. M., 123  
 Russell, A., 53  
 Russell, R. E., 472  
 Rutter, W. J., 132  
 Rynerson, E. H., 52

**S**

Sabatier, J., 141  
 Sahu, V. K., 474  
 Saldun de Rodriguez, M. L., 318  
 Salzberg, H., 133  
 Samuels, L. T., 132  
 Samuels, S. S., 232  
 Sancetta, S. M., 141  
 Sanford, M. C., 484  
 Sanger, F., 58, 141  
 Sarkar, D., 473  
 Sasson, M. I., 58  
 Saugman, B., 232  
 Sayen, A., 141, 406  
 Schaffenburg, C. A., 472  
 Schantz, E. T., 478  
 Scheibe, J. R., 137  
 Schilback, H. F., 397  
 Schilier, J., 232

Schiller, A. A., 59  
 Schlichtkrull, J., 465, 466  
 Schneeberg, N. G., 232, 318  
 Schöffling, K., 315  
 Scholes, G., 133  
 Schrock, C. E., 225  
 Schultz, P. H., 232  
 Schumacher, M. T., 303  
 Schusdek, A., 461  
 Schwab, H., 142  
 Schwartz, H. M., 406  
 Scott, G. I., 142  
 Scott, L. G., 396  
 Scott, O. B., 318  
 Scott, R. W., 141  
 Scoville, A. B., Jr., 318  
 Scow, R. O., 142, 154  
 Seay, P., 481  
 Segaloff, A., 142  
 Seifter, S., 143  
 Selesnick, S., 478  
 Seligman, A. M., 56  
 Seligson, D., 59  
 Seligson, H., 59  
 Sen, P. B., 478  
 Serre, H., 479  
 Setala, K., 129  
 Sethi, M. S., 147  
 Shacter, B., 478  
 Sharkey, T. P., 143  
 Sharp, R. L., 406  
 Shelton, E. K., 220  
 Shepherd, J. A., 408  
 Shepherd, S. J., Jr., 479, 480  
 Silk, E., 469  
 Smith, M. J., 480  
 Sherlock, S., 124, 220  
 Sherrill, J. W., 233  
 Shideman, F. E., 59  
 Shipley, E. G., 305  
 Shuman, C. R., 59  
 Shute, E. V., 318  
 Shute, W. E., 318  
 Siems, L. L., 141  
 Sienknecht, E. C., 143  
 Sigmond, B., 321  
 Silbert, S., \*297  
 Siliprandi, D., 319  
 Siliprandi, N., 319, 480  
 Silver, H. K., 227, 304  
 Silver, M., 144  
 Simonton, J., 131  
 Simpson, S. L., 407  
 Simpson, W. W., 225  
 Sindram, I. S., 234  
 Singh, A., 147  
 Singleton, A. O., 233  
 Sjögren, B., 313  
 Skelton, J. M., 50  
 Smart, J. V., 308  
 Smith, A. N., 407  
 Smith, J. A., 143  
 Smith, M. J. H., 302, 479  
 Smith, R. W., 55  
 Smyth, F. S., 227, 304  
 Snape, W. J., 406  
 Sokal, J. E., 480  
 Somogyi, M., 233, 319  
 Sophian, J., 143  
 Sophian, L. H., 233  
 Sos, J., 483  
 Soskin, S., 143  
 Spencer, A. G., 474  
 Spitzer, N., 144  
 Spring, M., 143, \*378  
 Stadie, W. C., 407, 468

Staffieri, J. J., 304, 319  
 Stampf, B., 230, 233, 235  
 Staub, A., 144  
 Stead, E., Jr., 134  
 Steele, J. M., 148  
 Steffensen, E. H., 55  
 Steinberg, A. G., 480  
 Steinbracker, A., 144  
 Steiner, P. E., 148  
 Stenstrom, W. K., 406  
 Stepantschitz, G., 144  
 Stephen, J. M. L., 144  
 Stephens, J. W., 144, 481  
 Sterling, R. E., 319  
 Stern, A. B., 305  
 Stern, J. J., 407  
 Stetson, R. P., 319  
 Stetten, D., Jr., 145  
 Stetten, M. R., 145  
 Stewart, C. A., 486  
 Stickle, A. W., 57  
 Stickney, J. C., 134, 481  
 Stoner, H. B., 481  
 Story, R. D., 140  
 Stowers, J. M., 145, 474  
 Striker, C., \*492  
 Strisower, B., 227  
 Strisower, E. H., 146  
 Stroud, M. V., 406  
 Stuhlfauth, K., 320  
 Stulberg, M. P., 140  
 Stutinsky, F., 481  
 Sugar, S. F. N., 146  
 Supplee, H., 478  
 Svec, M., 146  
 Swank, R. L., 146, 235  
 Sweeney, J. S., 147  
 Swift, H. B. N., 147  
 Swingle, W. W., 481  
 Swyer, G. I. M., 42  
 Sysi, R., 320  
 Szepsenwol, J., 147

**T**

Tabiasch, V., 482  
 Takeuchi, S., 469  
 Taylor, I. M., 484  
 Taylor, J. D., 320  
 Taylor, K. B., 52, 53  
 Taylor, R. M., 481  
 Teixeira, W., 397  
 Tempereau, C. E., 468  
 Tepperman, J., 126  
 Terriere, L. C., 147  
 Test, C. T., 148  
 Texter, E. C., Jr., 148  
 Thaler, R. W., 234  
 Thompson, M. D., 482  
 Thompson, M. W., 150, \*268  
 Thompson, R. H. S., 320  
 Thone, H., 148  
 Thorley, A. S., 148, 227  
 Threlfall, C. J., 50, 481  
 Tietze, F., 482  
 Tillman, A. J. B., 132  
 Tipson, R. S., 148  
 Tolstoi, E., 482  
 Töpi, G. C., 482  
 Tracy, A., 483  
 Travia, L., 482  
 Trewella, P., 44  
 Trowell, H. C., 482  
 Tseng, H. C., 148  
 Tunbridge, R. E., \*22  
 Tupikova, N., 148

Tuppy, H., 58, 141  
Tuttle, W. W., 303  
Tyler, F. H., 56, 462

U

Udenfriend, S., 149  
Uhry, P., 321, 407  
Uzan, M., 149

V

Vallance-Owen, J., 321  
Van Bouwdyk Bastiaanse, M. A., 234  
Van Buchem, F. S. P., 482, 483  
Van der Kleij, B. J., 234  
Van Liere, E. J., 481  
Vargas, L., 485  
Vaughn, M., 407  
Veghelyi, P. V., 483  
Velick, S. F., 149  
Vestling, C. S., 144  
Viau, A., 399  
Vicari, E. M., 483  
Vieira da Silva, M. C., 218  
Vieth, C., 149, 483  
Viguera Lobo, J. M., 301  
Villeg, C. A., 321  
Vizcarrondo, R., \*373  
Vogt, M., 149  
Volk, B. W., 134, 149, 312, 321, 469, 483  
von Haam, E., 132

W

Wachman, J., 137  
Wade, E., 400  
Wagner, R., 484  
Wagoner, A. N., 304  
Waife, S. O., 321  
Wajzer, J., 149  
Wakeley, J. C. N., 150  
Walaas, E., 407  
Walaas, O., 407  
Waldo, A. L., 486  
Walker, J. W., 150  
Wallace, D. M., 408  
Wallenfels, K., 322  
Walsh, G. C., 225

Wang, C. Y., 466  
Warkany, J., 312  
Warshall, H. B., 131  
Warthen, R. O., 484  
Watson, D., 301, 320  
Watson, E. M., 150  
Watson, E. M., \*268  
Watts, D. T., 235  
Weber, C. J., 137  
Webster, D. D., 322  
Weichenhain, H., 315  
Weichselbaum, T. E., 308  
Weigen, J. F., 484  
Weil-Malherbe, H., 150, 151  
Weinman, E. D., 146  
Weinstein, A., 151  
Weinstein, J. J., 151  
Weinstein, P., 408  
Weisenfeld, S., 475  
Weiss, J., 133  
Weitzner, H. A., 484  
Weld, J. T., 468  
Weller, J. M., 484  
Wells, C., 408  
Welt, I. D., 145  
Wertman, M., 471  
West, E. S., 42  
West, G. B., 152  
West, P. M., 468  
Westerfield, W. W., 464  
Westermeyer, V. W., 476  
Whipple, A. O., 408  
White, P., 485  
White, S. G., 131, 136  
White, T. J., 228  
White, V. K., 321  
Whitelaw, D. M., 225  
Whitley, J. M., 408  
Whitney, E. L., 55  
Wick, A. N., 47, 152, 322  
Wiele, H., 153  
Wightman, K. J. R., 481  
Wilder, R. M., \*183, 322, 323, \*351, 480  
Wilkerson, H. L. C., \*194  
Wilens, S. L., 153  
Willebrande, A. F., 400  
Williams, F. W., \*37  
Willis, K. J., 129  
Wilnot, V., 146, 235

Wilson, D. R., 153  
Wilson, J. L., \*33  
Wilson, J. L., 153  
Winter, A., 485  
Winterstein, H., 308  
Wohl, M. G., 321  
Wolf, S., 51, 310, \*383  
Wolff, H., 230, 233, 235  
Wolman, B., 485  
Wollman, S. H., 154  
Wolma, F. J., 233  
Womack, C. R., 138  
Woodward, H., Jr., 404  
Woodward, H., Jr., 462  
Woodyatt, R. T., \*240  
Wornas, C. G., 234  
Wrenshall, G. A., \*87, \*188  
Wright, P. M., 469  
Wu, C. K., 148  
Wu, W. J., 148  
Wyatt, C. J., Jr., 485

Y

Yang, T., 154  
Yankley, A., 131  
Yener, M. S., 154  
Young, B. A., 154  
Young, F. G., 124, 154, 301  
Young, P. A., 486

Z

Zajac, L., 154  
Zamil, E., 53  
Zelnik, R., 149  
Ziegler, M., 399  
Zilliacus, H., 408  
Zilinsky, J. D., 305  
Zilversmit, D. B., 322  
Zimmerman, H. J., 235  
Zipf, R. E., 486  
Ziviani, N., 408  
Zubrod, C. G., 235, 305, 462  
Zucker, G., 322  
Zuidweg, M., 311  
Zuleger, F., 43  
Zymaris, M., 134

## Book Reviewers for Diabetes, 1952

Frank N. Allan, M.D., Edward L. Bortz, M.D., Arthur R. Colwell, M.D., Jerome W. Conn, M.D., George M. Guest, M.D., James M. Hundley, M.D., Alexander Marble, M.D., Rosemary Murphy, M.D., Lester J. Palmer, M.D., Henry T. Ricketts, M.D., Randail G. Sprague, M.D., Russell M. Wilder, M.D., and Wallace M. Yater, M.D.



